Lectures ON DISEASES OF THE RECTUM.

Delivered at the Hospital for Women, Soho-square.

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LECTURE I.

HÆMORRHOIDAL AFFECTIONS.

GENTLEMEN,—I have chosen the subject of Diseases of the Rectum for my lectures this year, because those diseases, in a hospital such as this, devoted as it is to the diseases of women, are among the affections which come most frequently under my notice in the surgical department. The more strictly uterine affections I leave to the care of my colleagues the physicians.

It is obvious that many of the affections of the rectum are common to the two sexes. I have thought it better, therefore, to consider these diseases first, reserving for the last lecture those which are specially connected with the female organs.

First, let me say a word concerning the function of the rectum in health, and on its bearing on the general economy. I need hardly say that its function is, simply, to pass fæces—to get rid of them easily out of the body after all nutritious material has been absorbed from them. It has been disputed whether the rectum holds fæces in the normal state. I believe that the upper part always retains some small amount of fæces, but that the lower part does not, save under exceptional circumstances—when the periodical time of defecation has arrived, or when, under certain conditions, the bowel has become overloaded. Then of course the whole rectum may be filled and blocked, forming a distinct disease, simple enough and easily got rid of, but not uncommon, especially in the female. I may say, in passing, that the normal function of defecation should be perfectly painless. If we find a patient complaining of acute pain during the passing of fæces or afterwards, we may at once conclude that there is some serious mischief about the rectum. Pain in the act of defecation, it is as well to say at once, points rather to fissure, or to some painful ulceration of the rectum, than merely to the existence of piles. On the other hand, if a patient complains of a dull aching pain after the passage of a motion, the probability is that hæmorrhoids of some kind are really present. That presumption will be confirmed if you find that the patient passes blood with each motion. As I said, the act of defecation should be painless. It should also be regular. Most people only need to empty their rectum once in twenty-four hours; but of course there are varieties in this matter. All persons must not be expected to behave in the same way. We meet with some persons, especially women, delicately-fibred women, in whom a daily evacuation of the bowels would be more than their health could bear; they would suffer from it; and in such cases it would be simply folly to force a daily action. It is a mistake into which the public is very apt to fall, to think that they cannot be well unless they have a daily evacuation of the bowels. The surgeon should point out to them that, in many cases, that is not absolutely necessary.

Passing to the more strictly surgical matters, we come first to the causes of rectal disease. I do not like to use the word "hæmorrhoidal" too much, because it is erroneously supposed to mean piles. It may be more or less connected with piles, but is not so necessarily.

What, then, is likely to produce an affection of the rectum? The first cause is the straining effort in cases where the bowels are habitually constipated. There is no doubt that constant straining tends to produce engorgement of the veins about the anus, and whatever leads to straining tends to produce this. It occurs, for instance, in the straining from stricture of the urethra or enlarged prostate in elderly people. Both are frequent causes of hæmorrhoidal disease.

Turning to the female, we find, first and most commonly, pregnancy. Almost invariably in pregnant females some tendency to hæmorrhoidal enlargement is found. We all know how the veins of the legs are enlarged in pregnancy, or when any abdominal tumour is present, and the same thing occurs with the veins of the rectum. Usually the engorgement passes off after delivery and causes no further trouble; but after a woman has had a large family it is not uncommon to find permanent hæmorrhoidal disease. Of course, any tumour or displacement of the uterus, pressing on the rectum or interfering with circulation, will tend in the same way to produce hæmorrhoids.

Again, we find occasionally that the means which are adopted for the cure of these displacements really produce the affection of the rectum. Pessaries used to rectify these displacements often cause much harm to the bowel. This Hodge pessary, for example, which is simply a ring covered with gutta percha, often causes, by its pressure, engorgement of the lower end of the rectum. The same may be said even of Zwanky's pessary. A few weeks ago we had here a remarkable example of the ill-effects of Zwanky's pessary, which had been neglected by the patient. She was ordered to have it removed occasionally for cleanliness, but she left it *in situ* for many months. The result was that when she applied here there was a large communication between the vagina and the rectum, and the end of the pessary was forced back into the bowel. Dr. Protheroe Smith asked me to assist him in removing the pessary, which we did with considerable difficulty, after we had broken it in pieces, the patient being left with an incurably large recto-vaginal fistula.

Putting aside, however, the more special causes of hæmorrhoidal disease, its most frequent cause is constipation. I would advise any who have not yet done so to read Trousseau's lecture "On Constipation," published in the fourth volume of the translation of the New Sydenham Society. There are many hints in that lecture which would be exceedingly useful to any practitioner. One point to which he there calls attention is the use of belladonna internally as a stimulant to the bowel. I have no question in my own mind, from what I have seen, that this drug is most useful in these cases; and we shall see afterwards how useful it is externally in some of the cases of want of tone in the bowel.

Ordinary forms of constipation—cases of simple overloading of the bowel—must be treated on ordinary principles. A common plan is to give a simple dinner-pill with some aloes and rhubarb in it. The question whether aloes does harm in diseases of the lower bowel, I think, may be answered in the negative, for we do not find that patients with piles suffer more after taking aloes. A more elegant form of administering a regular aperient is to give some mineral water, and, for patients who can afford them, they are a very good form of medication. Friedrichshall or Pullna water may be given, a tumblerful or a half-tumblerful the first thing in the morning. This will frequently give a patient relief from the bowel which he otherwise would not have.

Another little point is worth attending to. Patients often complain that they have such difficulty and straining at the commencement of defecation. The fact is that the fæces lodged in the upper part of the rectum become more solid than those which are higher up in the sigmoid flexure; and when that first portion descends, it sometimes has some difficulty in passing, and the patient has also to strain a good deal to force it through the anus. In these cases I have for years told patients to practise a little manœuvre, which is simple, and I fancy not very commonly adopted. I called it originally—rather in derision of the accoucheurs, if they will excuse my saying so—"supporting the perineum." It consists in the patient pressing on the tip of the coccyx with the finger, so as to press upon the fæces contained in the bowel when he or she feels the motion passing with difficulty. There is no uncleanness, no necessity for encroaching on the anus, for there is plenty of room behind. In this way much distress may often be saved to the patient.

We will presume now that we have a case of disease of the rectum. The patient complains that there is something wrong, and the first thing is to examine thoroughly and see what it is. Examination of the rectum is a thing that is often shirked. Students do not always like dirtying their

fingers, and the practitioner often does not examine the rectum where he should do so. Therefore I insist strongly on the importance of doing this in both sexes. Examine it first with the finger, and then, if necessary, by sight. I myself never will prescribe for a patient who says that he or she has piles unless I can examine them. If you do—if you venture to prescribe for piles without examining—you will find that very frequently you are prescribing this or the other for a disease that does not exist. It is a dangerous thing to take a patient's own diagnosis. If you do you may discover, when some weeks have passed, that the diagnosis was quite wrong, and that you have been treating a disease altogether different from that which really exists. Patients not unfrequently come to me with fistula, who have been smearing their anus for weeks with gall ointment, under the impression that they had piles.

The more simply an examination can be made, the better. In the female it may be made as she lies on her side in the ordinary obstetric position. Thus you will be able to examine thoroughly the rectum, and, if necessary, to pass your finger into the vagina as well as the rectum. Thus a stricture of the rectum, for instance, can often be much more thoroughly examined through the vagina than is possible if the examination is confined to the rectum itself. A more convenient posture for men is to have them standing and leaning over a couch or table. It is more convenient for this reason. If the prostate is to be included in the examination, it is rather awkward, if the patient is lying on the left side and you are standing behind in the ordinary position, to turn your finger round and examine the prostate. By making the patient stoop, and examining him from behind, that difficulty may be obviated. The finger should first be educated to examine the healthy rectum, so that you may learn what the feeling of the rectum should be. I may say that the mucous membrane should be perfectly smooth, the finger should pass readily into the anus, and should encounter no obstruction whatever in passing up some little distance. You should feel no masses of any kind, and the lower part of the bowel should naturally be empty.

If a more minute examination is desired, a speculum may be employed. You may use the ordinary glass speculum, with the end cut off obliquely, or one that is not truncated. Perhaps the most convenient and simple one is a metal one, that can always be kept bright. There is a plug inside to facilitate its introduction. Of course, when examining the rectum, the plug must be taken out, and the mucous membrane then falls in. In withdrawing it, if the end is not open you are apt to nip any pile that may exist and to produce a good deal of pain. Therefore an important point is, to pass the finger into the speculum and push out any portion of mucous membrane that may have prolapsed into it. The instrument will then come out easily enough.

There is, however, quite another form of speculum, and one that is perhaps the most convenient of all. It is the bivalve speculum, being formed of two parts connected by a simple hinge. It has this advantage, that you can fix it open at any point, and then you can readily introduce your finger to examine any part, the speculum being turned round in any direction. Of course, in any examination the great object is to make it with as little pain as possible, and yet with perfect efficiency.

Disease high up the rectum may be seen by means of the endoscope, an instrument not in very common use. I show you one here. The lamp is shut up in the box, and the light from it is reflected by a mirror down the tube, which is introduced into the rectum. Looking through a perforation in the mirror as through the hole in an ophthalmoscope, you are able to see the mucous membrane in the lower end of the tube lit up by the rays of light thrown from the oblique mirror.

One other point with regard to examination of the rectum. It is well to examine it digitally, and also with instruments, but a confident opinion about diseases of the rectum cannot be given unless an enema is administered. This is a most important point. Let the patient get rid of the enema in the ordinary way and strain, so as to bring down anything that will come down, and then you have an opportunity of seeing what is the real state of the lower end of the bowel. Piles, polypi, and other diseases may be overlooked unless this precaution is taken.

With regard to hæmorrhoids, commonly known as piles, let me say that there is not necessarily hæmorrhage. You may, of course, have bleeding piles, but you may have blind piles, and you may have external or internal piles; but all are classed together as hæmorrhoids. The blood-supply of the rectum, I need hardly remind you, is from three sources, the superior, middle, and inferior hæmorrhoidal vessels. I have here Mr. Quain's work on the Diseases of the Rectum, the plates in which may serve to remind you of the anatomy of the parts. The connexion of the upper hæmorrhoidal vein with the vena porta is important, because it explains the occurrence of piles in persons in whom the portal circulation undergoes any obstruction. In organic disease of the liver, or in any tumour pressing on the portal vein, we are sure to have venous obstruction in the rectum. Hence we get formed a hæmorrhoidal tumour, a venous hæmorrhoid. Such tumour may be internal or external; more commonly it is internal, and in the form of an elongated vein, such as is well represented here in Mr. Quain's plate. If the veins get large they may protrude from the rectum as a large purple vascular mass, really an internal hemorrhoid becoming external. That is an important point, and to be insisted upon, because the treatment must be for internal hæmorrhoids; and, as we shall see, the treatment of the two disorders differs considerably.

Let us consider for a moment the subject of external hæmorrhoids. When a distended hæmorrhoidal vein becomes blocked up by a little clot, or by some inflammation around it, the result is that a little purple lump is formed by the side of the rectum. What becomes of such a hæmorrhoid if you leave it alone? After a time, the inflammation subsides with or without treatment. It very seldom suppurates. The blood which was effused in the pile becomes absorbed, and, consequently, the skin which was distended by the blood is left loose, and hangs in folds about the anus. If this has been repeated a few times a person who is said to have had several attacks of piles gets a series of loose folds of mucous membrane about the verge of the anus, which folds give rise to a great deal of trouble.

We may dismiss this subject at once, for the treatment of external piles is a tolerably simple matter. You see a little purplish mass outside the anus; all that you have to do is to make an incision into it, and squeeze out the clot. The incision should be made in a direction radiating from the anus. The clot is either in a vein or in a little cyst; it is a disputed point which. Let out the little clot, put a poultice on, and in a day or two the thing subsides, relief being given at once from all the sharp pain which existed before. If you do not thus interfere, you run a risk of suppuration, or of the formation of the troublesome loose folds.

The proper treatment for the loose folds about the anus is to cut them off. You can never do any harm, provided you are careful not to do too much. Pick them up, and snip them off in a direction converging to the anus. Do not do too much, for the reason that if you do a stricture of the anus may be the result. Every now and then one sees a patient who has been submitted to this heroic treatment, and who has got, as a consequence, stricture of the anus—a most painful complaint, which is practically incurable. So much for the subject of external piles.

Internal piles give rise to a sense of weight and discomfort if they are simply blind piles, but if they are bleeding piles, in addition there is loss of blood. The hæmorrhage may be simply venous, and if so it is of no great moment. It is no doubt due to some pressure on the portal vein, and it may be salutary in one sense—it may relieve the engorgement of the internal organs, and if slight it is perhaps better not checked. If you find, however, that the patient is losing arterial blood it is another matter. It is a mistake very commonly made to suppose that the hæmorrhage from piles is necessarily venous; it is by no means so. Sometimes the patient goes to the closet and finds a considerable quantity of arterial blood is evacuated, that it comes in gushes from the anus. Under these circumstances the patient becomes much reduced, loses blood in a way which the system cannot support, and may actually die from loss of blood from bleeding piles, though fortunately now-a-days this is rare. Loss of blood in excessive quantity is much more apt to occur and to be concealed among females than among males, both because the patient does not like to complain of it, and because the doctor sometimes is not careful to inquire about it. The patient is seen

to be anæmic, and the anæmia is treated without any investigation being made into the cause of the affection, whether from bleeding piles or otherwise. Always, therefore, in such a case, inquire whether there be loss of blood from the rectum. Of course this may occur as vicarious menstruation, cases being met with now and then in which a discharge from the rectum regularly recurs, month after month. With such loss it would probably not be advisable to interfere until the normal discharge is re-established.

Bleeding may occur from within the bowel, even though nothing ever comes down. The patient simply loses blood, and can tell you nothing more about it. Passing the finger into the bowel, it may often be found that there is a peculiar velvety feeling about one side, and on withdrawing the finger it is seen to be stained with blood. On introducing a speculum, and examining the spot, it will be found that there is a vascular-looking portion of the mucous membrane, much more like red velvet than anything else, from which the blood is passing. If such is the condition it can readily be cured. It is in these cases that nitric acid does such good. Apply the acid upon a stick through the speculum, touching the surface tolerably freely, care being taken to prevent the acid getting to other parts of the mucous membrane. One or two applications will often cure the case altogether. Usually, in addition to the loss of blood, with the straining there comes down a great mass of piles, originally internal, now external, all being thrust through the sphincter. From certain portions of the mass, usually the upper parts, which have this peculiar red appearance, blood exudes. These are cases in which more radical treatment must be adopted. You may, if you like, touch them with nitric acid, and a few years ago it was recommended as a panacea for all rectal disease. No doubt by it the hæmorrhage may be controlled for the time being; but you will not cure the piles, and the probability is that in a very few months the patient will again suffer from them, and perhaps also from the bleeding. Yet I occasionally use nitric acid for one single pile, especially in women, on the perineal side of the rectum, when the small vascular growth can be almost destroyed with one application of nitric acid; but I do not employ it for anything like a large spongy mass from which blood exudes, the delicate skin of the anus being everted and swollen and protruded by the side of it. I am particular about calling attention to this last, because it is very important with regard to treatment, since it must not be interfered with too freely, or a stricture is likely to be produced.

Given a case of that severity, what mode of treatment is to be recommended for it? The older surgeons used to cut off these piles. Dupuytren was exceedingly fond of doing this, and he cut them off with some success, but had many fatal cases simply from hæmorrhage. You will find in his "Leçons Orales" that he had lost several patients, and that in other cases he had great difficulty in stopping the bleeding. I need hardly say that such a state of things is not desirable, and would be sufficient to warrant one in finding some other method. Brodie was the first to use the ligature. He says in his Lectures that he happened to come across a lecture of Mr. Cline's, in which he decried the ligature, and said that only timid surgeons would use it, and that there was no harm in cutting the piles off. So Sir Benjamin Brodie adopted for a short time the practice of cutting them off; but he found that he lost a patient from hæmorrhage. Sir Astley Cooper did the same, and lost one or two patients from bleeding into the rectum. Nowadays I think no surgeon would think of cutting away internal hæmorrhoids without taking the most effectual means to arrest the hæmorrhage. In the great majority of cases the ligature is the most effectual means. Holding up the pile with forceps, you may put the needle through the base of one pile and tie it in two parts, and then treat the other masses in the same way. After a few days, when the parts have healed, there will be a complete relief to the ailment. But it is a very painful mode. You cannot help including some of the delicate skin of the anus, which is so well drawn in the figure in Mr. Curling's book. The pressure of the ligature in ulcerating through that gives rise to great distress; therefore it was that Mr. Salmon, who had a large experience in diseases of the rectum, proposed his plan. The hæmorrhoidal vessels enter the pile at the upper part, and therefore there is no danger in cutting at the lower part, where skin and mucous membrane join, so long as you take care to leave at the upper part the vessels untouched. Accordingly, instead of simply tying the pile, he cut between the mucous membrane and the rectum with a pair of scissors. Thus he isolated the pile from the delicate skin, and applied the ligature to the neck of the pile. That is the operation I ordinarily perform when I apply the ligature. The instruments required are simple. First, to get the pile down, the patient must have an enema, and strain. Then you grasp it with a pair of pile forceps, or, if you prefer it, with Salmon's hook, which answers exceedingly well, slipping the instrument into the anus, getting hold of the pile, and drawing it down. Taking a pair of curved scissors, you snip at the line where the mucous membrane and skin join. Having dissected up the pile in that way, then carry the ligature round the base of the pile, and tie the essential part of the pile in that way. Having done that, and thus secured the vessels, you may safely cut off the part you have isolated, within a reasonable distance of the ligature. That is the advantage of this modern operation: you can cut off the piles and get rid of them, instead of allowing them to slough away, much to the distress of the patient. Probably two or three piles will need separate treatment thus. The ligatures will probably come away at the end of a week, according to the thickness you have tied. In a few days more the patients are perfectly well and comfortable, and relieved. It is a satisfactory point to remember that if you operate on a couple of piles in the rectum in that way, although you have not destroyed the whole of the disease, the influence of the ligature and of the ulcerating and healing process is such that the patient is practically cured of his disease. Let me remind you that the operation is not finished if you have any loose folds about the margin, to which I have already referred. They should always be clipped off, though not to the extent of producing stricture of the anus.

Another method of treating piles which has been much cried up in modern times is the method with the clamp. The original clamp was an invention to be used in connexion with nitric acid. The late Mr. Houston, of Dublin, Mr. H. Lee, and others, have been in the habit of clamping the pile, cutting it off, and applying nitric acid. That was a tolerably effectual method, but it had its drawbacks. Mr. Henry Smith improved the clamp, and made it a useful instrument in certain cases. Its object is to take up the pile or mucous membrane, and, with a screw in the handle, to compress it. You then cut off the pile, and sear the cut surface with a small cautery, so as to stop all hæmorrhage. It answers well for slight cases, where you have loose mucous membrane, and not great masses of piles, and especially in those cases in which you have an opportunity afterwards of watching for hæmorrhage. I never operate in this way on cases which are bad or are at a distance, because there may be hæmorrhage afterwards. It does not often occur, but it does sometimes. If a ligature has been left on you know that hæmorrhage cannot occur, and that you may trust the patient at a distance from the surgeon. Another little drawback in the clamp is, that the greatest power is exerted at the hinge, which is at the anus. The critical part, where the vessels are, is apt to slip out of the grasp of the blades. To obviate this difficulty, Mr. Gowlland, who has had great experience in diseases of the rectum, invented a clamp which acts on a similar principle, but instead of applying it from below upwards, as Mr. Smith's clamp would be applied, it is intended to be applied from above downwards. The hinge against which the pressure is being exerted is at the upper part, where the vessels exist. My colleague Mr. Scott has also contrived a clamp of the same kind, in which the screw is retained instead of the spring catch of Mr. Gowlland's instrument. No doubt these are safer clamps, but are more difficult to apply, and therefore, for slight cases, I generally use Mr. Smith's clamp, while for more severe cases I prefer to use the ligature.

The after-treatment is simple. Give a suppository at the time of the operation, or give an injection of opium. Keep the patient quiet, and keep the bowels confined for a few days. On the third day give a little castor oil or some mild purgative, and let a bread-and-milk poultice be applied to the anus for a few hours after the first action of the bowels, which is always painful. Afterwards keep the bowels regular; and in a few days the patient will be well of his malady. If you have had to take away some pieces of loose skin, a few days longer will be required, and the application

of the dilute nitrate of-mercury ointment will be beneficial. You may safely promise the patient relief from all his troubles in ten days or a fortnight. I have had many cases here which have done exceedingly well with both methods of treatment.

ON THE ANATOMICAL & PHYSIOLOGICAL LOCALISATION OF MOVEMENTS IN THE BRAIN.

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For some years I have studied cases of disease of the brain, not only for directly clinical, but for anatomical and physiological purposes. Cases of paralysis and convulsion may be looked upon as the results of experiments made by disease on particular parts of the nervous system of man. The study of palsies and convulsions from this point of view is the study of the effects of "destroying lesions" and of the effects of "discharging lesions." And for an exact knowledge of the particular movements most represented in particular centres, we must observe and compare the effects of each kind of lesion. It is just what the physiologist does in experimenting on animals; to ascertain the exact distribution of a nerve, he destroys it, and also stimulates it. Indeed, this double kind of study is essential in the investigation of cases of nervous disease for physiological purposes. For limited *destroying lesions of some* parts of the cerebral hemisphere produce no obvious symptoms; whilst discharging lesions of those parts produce very striking symptoms. By this double method we shall, I think, not only discover the particular parts of the nervous system where certain groups of movements are most represented (anatomical localisation), but, what is of equal importance, we shall also learn the order of action (physiological localisation) in which those movements are therein represented.

I begin by speaking of destroying lesions, and take the simplest case—hemiplegia of the common form from lesion of the corpus striatum. A blood clot which has destroyed part of the corpus striatum has made an experiment, which reveals to us that movements of the face, tongue, arm, and leg are represented in that centre. This is the localisation of the movements anatomically stated. Physiologically we say that the patient whose face, tongue, arm, and leg are paralysed, has lost the most voluntary movements of one side of his body, and it is equally important to keep in mind that he has not lost the more automatic movements. The study of cases of hemiplegia shows that from disease of the corpus striatum those external parts suffer most which, psychologically speaking, are most under the command of the will, and which, physiologically speaking, have the greater number of different movements at the greater number of different* intervals. That parts suffer more as they serve in voluntary, and less as they serve in automatic operations, is, I believe, the law of destroying lesions of the cerebral nervous centres. It may be illustrated in the hemiplegic region itself: that limb which has the more voluntary uses—the arm—suffers more.

I have illustrated by a case of hemiplegia of limited range from a lesion of moderate gravity. But from lesions of different degrees of gravity we have hemiplegia of very different ranges, varying gradually from palsy of the face, tongue, arm, and leg of one side, to universal powerlessness.† Or, physiologically speaking, there are all degrees, from paralysis limited to the most voluntary parts of one side of the body to paralysis of the most automatic parts of the whole body. The movements of the heart and respiration are less frequent, and the temperature is abased (soon after the seizure, of course, is meant). The patient, to put it in the shortest way, *is reduced to a more or less automatic condition*, according to the gravity of the lesion.

It must be added, that degrees of hemiplegia are not simple degrees; that is to say, they are not either degrees of more or less loss of power only, nor degrees of more or less range only, but of both. They are compound degrees. For example, if there be paralysis not only of the *most* voluntary parts of the body—face, tongue, arm, and leg,—but also of those next most voluntary (or, in equivalent terms, of those next least automatic—viz., loss of certain movements of the eyes and head and side of the chest), we find that the most voluntary parts (face, arm, and leg) *are very much paralysed*. In other words, the graver the lesion not only the more are the most voluntary parts paralysed, but the further spread to automatic parts is the paralysis.

From these facts, supplied by cases of destroying lesions of the centre producing *loss* of movements, we may conclude that the physiological order of representation of movements in the corpus striatum is such that action in health spreads from the automatic to the voluntary; or rather (the unit of action of the nervous system being a double unit—a molecule of two atoms) that there is *first* action spreading from the automatic to the voluntary, and then action spreading in the reverse order.* The spreading of healthy movements is best illustrated by degrees of "effort," as in lifting weights. There is first fixation of the more automatic parts of the arm, side of chest (and still further in automaticity according to the preconceived degrees of heaviness of the object), before the most voluntary part, the hand, grasps the weight and then lifts it. The heavier the weight, not only the more strongly are the most voluntary parts used, but the further does the movement spread to the more automatic parts. This compound spreading of healthy movement corresponds to the compound degrees of hemiplegia.

I will try now to show that the physiological order of gross movements applies to the movements of speech. I say *movements* of speech advisedly, as I think the abrupt distinction made in the expressions "loss of memory for words" and "ataxic affection of speech" is arbitrary and misleading. (On this matter more will be said later.)

The physiological order applies to the classification of the whole of the phenomena of cases of so-called aphasia: to the positive—the inability to speak; and to the negative—the ability to understand speech. Taking an ordinary case of entire *loss* of speech, we find that the patient has lost the most voluntary form of expression (speech), and has not lost the most automatic (emotional manifestations). We find that pantomime, which, bordering on gesticulation, stands half-way, suffers little. We find that the exception to the statement that the patient is speechless (for he can usually *utter* some one or two words) is frequently the exception proving the rule. He has lost speech altogether, *except the most automatic of all propositions*—"*yes*" *and* "*no*." Even these real words are often only of interjectional value; they can often be used only along with emotional manifestations—can be used, that is to say, automatically only. And, curiously, we find occasionally that the patient who can *reply* "No" correctly may be quite unable to *say* "No" when told. Another occasional exception proves the same thing: He may *utter* oaths or other ejaculations when ex-

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* I shall use (and, after the physiological definition, without any psychological implication) the words voluntary and automatic. It is not to be implied that there are abrupt demarcations betwixt the two classes of movements; on the contrary, that there are gradations from the most voluntary to the most automatic.

† Of course, the term "hemiplegia" becomes a misnomer when there is universal powerlessness. I shall have more to say of the universal powerlessness which occurs from disease of but one side of the brain when I consider convulsive seizures.

* That the unit of action of the nervous system is double the unit of composition is inferable from the fact that the whole nervous system is double; this conclusion runs physiologically parallel with the psychological law that all mental operations consist, fundamentally regarded, in the double process of tracing relations of likeness and unlikeness. The lower parts of the nervous system are plainly double in function, and it would be marvellous if the higher parts were not so too. The most automatic of the visible movements of the body "practically" constitute a single series although we see that they are in duplicate. The two sides of the chest act so nearly together in time and so nearly equally in range that there is "practically" but one movement. But the very highest movements—those for words—are *apparently* in single order too, but for the very opposite reason. It is because we only consider the *end* of word-processes (speech), and neglect altogether the prior automatic reproduction of words. In the double action, of which the second part is speech, there is first, I suggest, the automatic and unconscious reproduction of words. Later in this paper will be given facts which tend to show—(1) that the unit of action of the nervous system is double the unit of composition; (2) that the higher the nervous processes are the more unlike become the two components of the unit of action; (3) that the unlikeness is first in time, one acting before the other; and second in range, one being in stronger action than the other.

cited which he cannot *say*—cannot repeat—when he tries to do so. Occasionally he gets out ejaculations of a less automatic character (less general in the sense of being suitable to fewer occasions). Thus he may say "Thanks," "Good-bye," on fit occasions, but not when he tries. In a narrow corner we see the same thing: he may be unable to put out his tongue when he tries, and yet move it well in all automatic operations. But there is a far wider and far more important illustration to be given. Coining the word "verbalising" to include all the modes in which words serve, we see that there are two great divisions or rather extremes of verbalising: one is the voluntary use of words (speech); the other is the automatic use of words as in receiving speech of others. Now in the ordinary "specimen" of loss of speech the former is lost and the latter is intact. The patient cannot speak at all, but understands all we say—on simple matters, at any rate. That he cannot write is simply loss of speech in another form. For the physiological reality of speech it matters nothing whether the proposition be uttered aloud or to ourselves; it is enough that certain nervous powers *be excited, and excited in definite order:* if they be strongly excited, there is external speech; if slightly, there is internal speech. So that internal speech and internal reproduction of words are not synonymous: there is a voluntary internal reproduction of words in new and propositional forms (as occurs when we write); and there is an automatic internal reproduction of words in old and acquired forms or in forms given us, as when we receive and understand words in propositions spoken to us.

This physiological order will, I think, be of great use in the investigation of mental diseases proper. It seems to me to apply, at any rate, to some comparatively simple mental symptoms which occur in general physicians' practice. After some epileptic or epileptiform seizures, the patient becomes strange or outrageous, and acts queerly or violently. My speculation is, that in these cases he is reduced by the fit to a more automatic mental condition. Thus I have recorded the case of a man (THE LANCET, March 18th, 1871) who walked eight miles in a state like that of somnambulism. He was subject to fits, beginning by a subjective sensation of a disagreeable smell, and depending on (as, I suppose, *petit mal* always does) changes in the region of the anterior cerebral artery. Now, just as after a fit of unilateral convulsion a patient is often reduced to a more automatic condition, so far as his *physical* state goes—he is left hemiplegic of one side,—so I suppose this patient was reduced to a more automatic condition, so far as his mental state was concerned.*

(To be continued.)

THREE UNUSUAL CASES OF LITHOTOMY.

BY W. H. FOLKER, F.R.C.S.,

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THE interest taken in the various operations for the removal of stone from the bladder is so general amongst surgeons that I feel no apology is needed for placing the following cases on record, each one having a peculiar interest of its own either in the diagnosis or the character of the stone itself.

CASE 1.—Jane J——, a married woman, aged twenty-seven, was admitted into the North Staffordshire Infirmary in August, 1870. The patient stated that she had had great pain in the womb for a long time, but was uncertain how long before the birth of her last child (about twelve months ago), but since then the pain has been getting more severe every week, and lately has become almost unbearable. She feels a hard lump inside, and loses blood very often; there is also at times much difficulty in passing water. The surgeon who sent the patient to the infirmary thought she had a vesico-vaginal fistula, the woman herself thinking she had disease of the womb.

An examination showed that the uterus was quite healthy, and occupying the normal position. A hard substance was felt near the neck of the bladder, which a vesical sound at once proved to be a calculus of considerable size. For a long time past she had been unable to hold her urine, hence perhaps the idea that it might be urinary fistula. The patient was very weak and evidently suffering severe pain. There was dulness over the upper part of the left lung, with tubular breathing and bronchophony. Diarrhœa was also present. Milk diet was prescribed, with small doses of compound kino powder, afterwards altered to tincture of opium and dilute hydrochloric acid; perfect rest in bed; diluents to drink *ad libitum*.

On September 6th, the patient being under chloroform, a large calculus was removed through an incision in the urethra, it having been found impossible to dilate it sufficiently to admit of the stone being drawn through. The calculus, which was chiefly phosphatic, was nearly circular and rather flattened, measuring about an inch and three-quarters in diameter. An india-rubber catheter was secured in the bladder, an opiate given, and milk diet, with beef-tea, ordered, which in a few days was changed to meat with a little wine.

This patient was most unruly throughout, taking the catheter out of the bladder every time it was inserted, and allowing the urine to dribble over the wound, and refusing to be syringed or to do anything that was ordered. When discharged there was a vesico-vaginal fistula. She has not been heard of since. Whether the fistula closed, or whether she died of phthisis, is not known.

CASE 2.—James W—— was admitted into the North Staffordshire Infirmary with symptoms of stone. On the day of his admission he was sounded and a large stone detected. He was at once operated on by the lateral method, and an oval-shaped stone removed weighing 2 OZ. 4 drs. The stone was heavy for its size, and covered with rough phosphates.

Eight days after the operation urine was passed by the urethra, and from that time he continued to improve. Still the wound did not entirely heal, and at times the urine was ammoniacal and ran away from him. A small calculus was found impacted in the urethra, about an inch and a half from the meatus. This was removed by getting the scoop of a director behind it. The boy then made a rapid recovery.

The mother states that she has known of the existence of stone in her son for four years, and that for the last ten months he has cried when he passed water. But notwithstanding this, and the very large size and roughness of the surface of the stone, this little lad looked well-nourished and plump, and seemed to suffer no constitutional irritation.

CASE 3.—Wm. M——, aged twenty-three, was admitted Dec. 13th, 1870, with incontinence of urine and great emaciation. The patient, who had formerly been very strong and well, was a labourer. A year ago he was crushed between a cart and a wall, being much bruised about the buttocks and lower part of the belly. Not being able to pass urine, he was seen by a surgeon, who with much difficulty passed a catheter. The surgeon states that the catheter, a No. 3 gum-elastic, slipped into the bladder, the small ivory portion becoming detached. After this the patient micturated very well, and no attempt was made to remove the catheter. He says he has had no difficulty since in passing urine, but it gradually became muddy and offensive in odour; he was, moreover, obliged to pass it frequently, and suffered much pain in the lower portion of the belly. Latterly he has been quite unable to hold his water, whether in bed or sitting up; he has become emaciated, and too weak even to sit up.

On admission the patient was unable to move without assistance; his urine was ammoniacal and contained pus and a little albumen; appetite very bad; tongue red and glazed; pulse 120 and very weak. A sound was passed, and a large mass found in the bladder. The condition of the man being so desperate, it was thought advisable to operate at once. Chloroform was accordingly given, and a very large lateral incision made, when an oblong mass was seized by the lithotomy forceps in the long diameter and extracted. The bladder was syringed out with tepid water,

* In cases of slow deterioration of brain, the disposition "alters"; I fear it is that the natural disposition has its way, and that our more animal, our more instinctive habits and desires are no longer subordinated. There is reduction to a more automatic condition; there is dissolution, using this word as the corresponding opposite of evolution. The weaker the mind the more do the more automatic desires have their own way. In a few cases of intracranial hæmorrhage the patient becomes violent and swears; resembles the "drunken man," whose "natural disposition comes out"; the condition expressed by the proverb "in vino veritas" is equivalent to a reduction to a more automatic condition in which the natural impulses have freer play.

and a plug of lint put into the external wound. Milk diet with beef-tea and eggs. At 9 P.M., five hours after the operation, he was very restless; pulse 152; temperature 106·3°; great thirst.

Dec. 14th.—Slept well after a draught of Battley's sedative solution; pulse 136; temperature 101°.

From this time the patient improved rapidly. On the 17th he passed water by the urethra, and in three weeks, the wound having healed, he was discharged cured. He had good control over his urine, which was improving daily, and he was gaining flesh and strength very rapidly.

The mass removed consisted of a flexible gum catheter, folded up so as to form a sort of double loop in the centre, both ends being in the same direction. Around the centre was an irregularly formed mass of phosphatic deposit, the two ends being nearly free. In the folds were three loose

pieces of the same kind; they came away with the rest, but fell out afterwards. It measured 3¼ by 2¼ in. and 1 in. in depth. The above woodcut is taken from a photograph of the mass.

Hanley, Staffordshire.

FURTHER OBSERVATIONS ON THE SKIM-MILK TREATMENT OF DIABETES MELLITUS.

BY ARTHUR SCOTT DONKIN, M.D.,

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(*Concluded from page 46.*)

IN illustration of this observation and of the importance of early treatment, I may here refer incidentally to two cases of diabetes now under my observation. In one the disease was apparently of only seven or eight months' duration; the patient, having during the last four months been kept under a restricted diet, was passing from four to five pints of urine containing 25·340 grs. of sugar to the ounce. Under the skim-milk treatment the sugar entirely disappeared from the urine in fourteen days. In the other, the patient had not suffered from the severer symptoms of the disease longer than two months; but his diet was unrestricted, and he passed ten pints of urine daily, containing 30·092 grs. of sugar per ounce. The whole of this was removed and the disease completely arrested in eleven days by the skim-milk treatment, a result in a great measure attributable to the early application of the remedy.

During the last few years that I have directed my attention specially to this subject several cases have come under my observation in which the disease was so far advanced, and had inflicted such irreparable injury on the constitution generally and nutritive process—on the vitality of the organism, if I may so speak,—that but little good could be effected beyond subduing the more distressing symptoms. In some of these instances, most unfortunately, the disease had not been recognised until it had advanced in its destructive progress for years; and this reflection urges me to remark that diabetes will still continue too frequently to escape detection, in a similar manner, until its symptomatology is rewritten in most of our text-books on medicine, thus enabling the student to become familiar with its features in its initial or earliest phase. As hitherto described, the symptoms enumerated are those characteristic of an advanced stage of the malady—namely excessive thirst, a parched skin, a very large flow of urine, a voracious appetite, and emaciation. Now I venture to repeat what I have already stated on this important subject, that the invasion and early stage of the disease do not produce this assemblage of symptoms, and must therefore be recognised by a widely different class of phenomena. These are—a general feeling of debility not due to emaciation or loss of flesh, considerable nervous and muscular prostration, lassitude and disinclination for bodily and mental exertion, occasionally a dull pain over the loins, loss of sleep, frequently dimness of vision, a feeling of numbness or loss of sensation over the surfaces of the thighs, a clammy condition of the mouth without much thirst, or preternatural dryness of the skin, which is frequently perspiring. Whenever we meet with this category of symptoms, more or less complete, our suspicions should be aroused and the urine carefully examined for sugar.

In cases of diabetes too far advanced to admit of cure and the consequent removal of the sugar completely from the urine, the skim-milk treatment will reduce the quantity of sugar to a very much greater degree, and hold the disease in check far more powerfully than any other remedy yet discovered, to say nothing of the subjugation of the more distressing symptoms, as already described in my previous contributions. In illustration of this effect in such instances, I will cite the following case, in which a diet restricted (except the lactine of milk) to purely nitrogenous substances, was subjected to a lengthened trial in the first instance, and then an exclusive regimen of skim-milk.

W. B——, aged sixty years, lost his health two years ago, when he was obliged to give up work, and began to lose flesh and weight rapidly (his weight at that period having been 15 st., but now reduced to 8 st. 13 lb., showing a loss of 5 st. 13 lb. up to the present time). At the commencement of his illness his appetite greatly increased, and he began to suffer from excessive thirst, great debility and loss of muscular power, a greatly increased flow of urine, and a dry skin. These symptoms have since gone on gradually increasing. The large flow of urine induced him to remark to his medical attendants that his blood was going to water, but still the disease remained undetected until it was recognised by another practitioner in April, 1872, or eighteen months after the health of the patient broke down. When closely questioned on the subject, the patient stated distinctly that long prior to the period he fixed as the beginning of his illness (when he could no longer work) he suffered much from debility, weakness of the limbs, and general indisposition. The disease, therefore, as usual, appears to have come on insidiously, and to have had its origin at a date long anterior to the period when it became so fully developed as to cause a complete breakdown of the patient's health, and the accompanying great emaciation and other distressing symptoms indicative of an advanced stage of the malady.

When I first saw the patient on the 10th of August, 1872, he suffered from the symptoms just enumerated and complained much of weakness and diminished sensibility of the limbs and loss of sensation in the feet, almost complete in the soles, so that his gait, with the assistance of a stick, was very unsteady. For months previously he had confined himself to a diet consisting of 1½ lb. of beef or mutton, green vegetables, a moderate quantity of ship-biscuit, and a quart of milk daily; he also drank water. He was passing from 8 to 9 pints of urine having a density of 1040, and (on the 10th of August) containing 21·247 grs. of sugar to the fluid ounce.

He was now placed on a restricted diet, consisting of 1 lb. of lean chop or steak, taken at breakfast and dinner, three or four pieces of gluten bread, and from 7 to 8 pints of skim-milk daily. All saccharine and starchy matter (except the lactine of skim-milk) and fat in a great measure were thus strictly excluded. This regimen was strictly adhered to for a period of nine weeks, but with only slight improvement in the condition of the patient, so that on the 12th of

October he was voiding 7½ pints of urine, specific gravity 1038, and containing 25·340 gr. of sugar to the fluid ounce.

He was now subjected to an exclusive skim-milk diet (9 to 10 pints daily, 3 pints being made into curd, and taken at three meals). The following table shows the result on the disease as revealed by the rapid and remarkable diminution in the quantity of urine-sugar. I must add that the quantitative estimation of the sugar was made by the beautiful polarising saccharimeter of Soleil, perfected by the manufacturer, Duboscq, of Paris, by which the most exact results are easily obtained.

Diet restricted to meat, gluten, bread and skim-milk, end of ninth week.	Pints of urine daily.	Specific gravity.	Grains of sugar per fluid oz.
12th October...	7½	1038	25·340
Exclusive skim-milk diet begun 12th October.			
16th October...	6	1030	19·797
22nd „	6	1021	12·670
26th „	6½	1015	7·419
30th „	6½	1020	9·502
1st November	5½	1020	10·294
4th „	6	1015	7·127
8th „	5	1012	2·771
12th „	5½	1007	1·583
18th „	4½	1010	2·375

It will thus be observed that in the space of thirty-six days the skim-milk treatment gradually reduced the quantity of urine-sugar from 25·340 gr. to 2·375 gr. per fluid ounce of urine—a diminution equivalent to 22·965 gr. per ounce,—and at the same time decreased the daily quantity of urine to the extent of 2½ pints.

This case is not only of very great importance in illustrating the remarkable potency of skim-milk in checking the disease and preventing the formation of sugar, but it is extremely valuable in demonstrating, in the clearest possible manner, the fact that skim-milk loses its curative power altogether, and becomes valueless as a remedy, in diabetes, when administered in combination with solid animal or other nitrogenous food. I have repeated the experiment over and over again, with every variety of modification, in similar cases, and always with the same result.

I may add that the improvement in the general health of the patient, and in the more important or distressing symptoms, especially in the loss of sensation in the feet and legs, has been quite commensurate with the decrease of the urine-sugar. He now walks steadily and with a firm step. He is still under treatment; but a complete recovery is scarcely to be expected.

In the treatment of diabetes it must be remembered that the source of the urine-sugar is the food. The most remarkable pathological character of the disease is its power of *misappropriating* the proximate principles of food required for the nutrition of the body and the production of animal heat, converting them into an unassimilable substance incapable of oxidation—namely, diabetic sugar, which is cast out of the system by the kidneys as a useless and injurious foreign substance.

At first there is only a *partial* malassimilation of starchy and saccharine substances, but this becomes *complete* as the disease advances. Next comes a period when the fatty matter of the food is likewise converted into sugar; and when this stage of the disease is fully developed the whole of the carbonaceous alimentary principles are misapplied, instead of being assimilated and undergoing their normal metamorphic changes. Consequently they are not oxidised, and the temperature of the body falls below the healthy standard. Unfortunately this is not all, for if the disease runs its course unchecked it passes into a much more serious phase of its progress, and the albuminous or nitrogenous principles of the food also begin to contribute to the formation of diabetic sugar, and in quantity gradually increasing as the disease advances towards its termination, until a very small proportion is left to nourish the tissues and maintain the heat of the body. Thus, Professor Greisinger* found, by careful experiment on a diabetic patient restricted to a rigorous meat diet, that only *two-fifths* of the whole of the albumen consumed in the food remained available for the purpose of nutrition, the rest being converted into diabetic sugar. But this does not even represent the full extent of the malassimilation of albumen in very advanced cases.

These data supply a ready and intelligible explanation of the gradually increasing and at length extreme emaciation observed in diabetics, accompanied, *not* by pyrexia, but an abnormally low temperature of the body, the latter condition being due to the complete absence from the blood of the oxidisable products of the assimilation of the carbonaceous principles of the food, and the great deficiency of those derived from the albuminous. Hence we can readily understand the fact shown by the recent investigations of Pettenkofer and Voit, that in diabetes there is a diminished consumption of oxygen, and a correspondently decreased production of carbonic acid by the process of respiration.

I have already referred to the necessity on the part of diabetics to refrain from starchy and saccharine articles of food, in order to prevent a return of the disease after recovery. The prohibition of bread from the regimen thus prescribed is generally complained of as the greatest hardship to be endured; consequently, various substitutes have from time to time been invented. Thus we have the gluten bread first suggested by Bouchardat, and the bran biscuits made according to different formulæ; the former, however, is insipid and unpalatable, while the latter, when free from starch, are composed entirely of *lignine*, and, therefore, contain no nutriment whatever. To obviate these serious objections, it struck me that a very important end would be gained if a kind of diabetic bread could be manufactured consisting of an admixture of gluten and bran. I therefore communicated with Mr. Van Abbott, of Princes-street, Cavendish-square, on the subject, and he has succeeded in getting manufactured in France, after much difficulty, a bread consisting of 80 per cent. of gluten and 20 per cent. of bran nearly free from starch, and a very small quantity of butter. This bread is a much closer approximation to ordinary brown bread than any other substitute now in use. It is not only agreeable and palatable to the patient, as well as nutritious on account of the large proportion of gluten, but, what is also very important, it excites the peristaltic action of the bowels, and prevents or corrects constipation in consequence of the *lignine* it contains in the form of bran. I have no hesitation in saying that this bread is much superior to any other form hitherto produced for the use of diabetics.

In closing this series of contributions, I may state that I have conducted some experiments with lactic acid in the treatment of diabetes, but find it possesses no specific action on the disease apart from the strict animal regimen in conjunction with which it is administered. I intend at a future period to publish my experience on this subject.

Henrietta-street, Cavendish-square, W.

* Archiv für Physiolog. Heilk., 1859, p.

ON NÆVI MATERNI.

By W. G. CARTER, M.R.C.P. Lond.,

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HAVING frequent opportunities of seeing different forms of these interesting cases, and the treatment used for their cure, perhaps a short account of some of the remarks of others, together with a few of my own, on the subject, may not be uninteresting to some of the readers of THE LANCET.

Nævi materni, or the erectile tumours of Dupuytren, are of various kinds: they may be either cuticular, subcutaneous, or deep; they may consist of the small ramifications of arteries or veins, or arteries and veins conjoined; they may be either simple or complicated, sometimes having a distinct vascular origin, at others associated with a vascularity of some immediate neighbourhood. They are the aneurism by anastamosis of some authors.* Rokitansky observes with respect to them that, although they are capable of swelling out and undergoing considerable collapse, there is no analogy between the arrangement of their vessels and that which occurs in erectile organs. Telangiectasis, says he, is generally congenital, although capable of further development after birth; and in some

* Scarpa, J. Bell.

instances originates in later periods of life, and is sometimes the result of accident or other diseases. It consists in a dilatation of the capillaries, and appears sometimes in the form of slightly elevated patches, which may be smooth or may present inconsiderable nodules either of a bright-red colour or of a darker purplish hue, either tough and elastic or soft and of a doughy consistence. It has been mainly referred to a transition of the dilated extremities of arteries into saccularly-formed, dilated, venous radicles, from whence a varicose condition extends for a larger or smaller space; and that the dilated vessels are held together by means of a loose and partially embryonic cellular substance. But, he observes, these views require much reconsideration, more especially in those instances which occur in after-life as the result either of accident, repeated inflammations, loosening or rarefaction of tissue in the neighbourhood of ulcers, and justly remarks that the dilatation of the existing capillaries, which has commonly been considered as sufficient cause for the anomaly, is certainly in many instances inadequate to explain its existence, as we find that in addition to this condition there occurs simultaneously a new order of vessels. Hasse observes (p. 104), on vascular growths, telangiectasis is developed out of the capillary system, the dilatation being in the majority of cases evidently congenital; it therefore exists from earliest childhood, often continues long at its primitive stage, and is susceptible of various changes of form; but although many instances of telangiectasis obviously depend upon dilatation of the capillaries alone, and neither veins nor arteries can be detected in the tumours, cases occur, nevertheless, in which the arterial or else the venous character preponderates. In the arterial form the tumours are of a bright red, flattened, and studded with granular elevations resembling in form and colour a ripe strawberry; they tend to spread superficially, after death or extirpation; without collapsing, they become blanched. In the venous form the tumours are bigger than the others, spherical, knobby, prominent; their surfaces smooth, of a bluish-red or cherry-colour, prone to enlarge not only superficially, but in all directions. After death or extirpation they shrink together disproportionately to their size, partially retain their colour, and convey, when compressed between the fingers, a certain impression of thinness in their membranes. Wherever erectile tissue is developed, the cellular texture or parenchyma of organs is ere long removed, and the tumour consists exclusively of vessels closely interwoven and intimately communicating with each other. The external skin is elevated, attenuated to the utmost, and may at length give way under hæmorrhage. Under particular circumstances certain of these venous cells described may be attacked with inflammation, mostly of a low grade, inducing coagulation of the contained blood. Stagnation and the like may operate in the same manner, giving rise to the formation of concentric fibrinous layers, which are sometimes converted through calcareous deposition into veinstones.*

Telangiectasis occurs most frequently beneath and within the external skin, more particularly where the latter adjoins the mucous membranes. The tumours mostly occur in groups, and sometimes very diffusedly; but that they become developed in parenchymatous organs within the body is attested by Dupuytren, Lobstein, and others. Their relative frequency appears to be greatest in the liver. The form most likely to assume a dangerous or serious character is that with venous preponderance. Certain vascular tumours are essentially malignant. Fungus hæmatodes, considered by some as a variety of telangiectasis, may be said to correspond in anatomical structure with erectile tissue, except that we can no longer discriminate the venous or arterial portions or the canals and parietes of vessels; the whole, indeed, more closely resembles a network of dirty-red cells and meshes. Thus then, from the remarks of two standard authorities on pathological anatomy, it appears that these tumours consist of a dilatation of the capillaries, verging either towards the arteries in one case or the veins in another; but, as Rokitansky observes, the mere fact of the dilatation does not account for the cause. And Hasse observes that these tumours may become changed into others of a most frightful character; and, as they have been known to assume a somewhat hereditary character, the question suggests itself, are they the result of some constitutional defect of either parent? It is evident, however, no matter what the cause of their development may be, that no time should be lost before we endeavour to remove or destroy them as soon as their existence shall have been made known to us. Now the means at our command for either the one method or the other are, excision, ligature, compression, vaccination, transfixion, caustics externally applied, and the injection of the tumour with certain substances, such as the solution of perchloride of iron, &c., either of which may offer a few suggestions not unworthy of consideration, as one remedy will be useful in some cases, whilst useless in others, and *vice versâ*.

Firstly, as regards excision. This appears the most efficacious of all the measures we possess for the cure of these tumours, provided they are not too large and in a situation where they may be easily reached or hæmorrhage quickly controlled, and where the sides of the wound may be easily approximated; for it frequently happens that serious hæmorrhage takes place immediately after the operation. Chassaignac mentions a case where the infant was four hours in a state of syncope after the removal of a small tumour from the forehead; and Wardrop had the misfortune to see one of his patients die under his hand after the removal of a tumour from the back of the neck.

Secondly, as regards the ligature. This may be regarded from a twofold point of view—the one where a large vessel which supplies the part where the tumour is situated is tied, in the hope of arresting its supply of blood, and thereby lessening or destroying it; the other where the ligature is applied to the base of the tumour itself. The first is very doubtful in its efficacy, and, in opposition to a few reports of very doubtful character, we have numerous examples of its insufficiency. The only advantage it seems to have is to check them, and for a short time only; and, when we consider their situation and the nature of the capillary circulation itself, it is only reasonable to suppose that it should be so. Dalrymple and Travers have tied the carotid artery for vascular tumours with only relief for a short time. Dupuytren tied the carotid for a tumour of the nose without beneficial results. Mussey tied both carotids without a favourable result; and Lawrence tied both radial and ulnar arteries for a tumour of the ring finger without success. The second, where it can be applied, is more to be relied on for its utility, and may be considered next to excision for certainty of success. It is of a compound character—viz., that of transfixion and ligature: i.e., two pins are passed through the base of the tumour at right angles to each other, and underneath them the silk is tied with such force as to strangulate all the vessels, and cause the death of the part, which ulcerates, and leaves an open wound to cure by granulation, the advantages of which method are simplicity and safety.

Thirdly, as regards compression. This method can only be of service where the tumour is small, and situated where firm resistance can be maintained for a considerable time, whereby slow inflammation with obliteration may be produced.

Fourthly, as regards vaccination. This method is useful where the tumour is small and easily surrounded, but if large and not so situated it is likely to fail. Transfixion has been mentioned under the head of ligature. Caustics are so difficult of application to the part alone, and at times produce such frightful disfigurement by running over the adjacent parts, that for a large or conspicuous tumour they must only be resorted to if less injurious measures cannot be used.

Fifthly and lastly, as regards the injection of the tumour with certain substances, such as the perchloride of iron in solution, &c. This method, comparatively easy of performance and frequently successful, is not free from considerable danger; several instances of almost immediate dissolution have occurred after the injection of the tumour with a few minims of such substances, particularly when situated on the face or upper portion of the body.

In conclusion, I desire to state that the means which I would wish to recommend, and which I believe is not so often resorted to as it might be, is that of electrolysis—that is, two wires (or one if preferred) of platinum passed through the tumour at right angles to each other, as for transfixion, and made red-hot by means of Althaus's battery, working about eight cells. It can be used as frequently as you like.

* A case of telangiectasis of this nature was operated upon by Prof. Carus at the Surgical Dispensary at Leipsic.

It is devoid of all danger. The hæmorrhage is arrested the moment the wires (or wire) are raised to the necessary heat, and the patient suffers little or no inconvenience the moment the wires are withdrawn. I have used it with most satisfactory result, and I have before me a letter from Dr. P. C. Smyly, of Dublin, to a friend of his here, in which he states that he is much satisfied with its use. He says, the great thing is to injure the skin as little as possible, and to work with the point of the needle well under it. I must confess that I passed the wires through the skin and found no bad result from so doing, although I can well imagine by giving more time to the operation, and doing as he suggests, less deformity would be likely to arise—a consideration of much importance should the tumour be situated in a very conspicuous part of a female, or even on the face of a male.

Belle Vue, Clifton.

THE WATER-SUPPLY OF MILITARY CANTONMENTS IN INDIA.

BY EDWARD NICHOLSON, F.C.S.,
ASSISTANT-SURGEON R.A.

I HAVE just received the Army Medical Department Blue-book, containing the sanitary report by Dr. Muir, which has incurred the reprobatory remarks made by Surgeon-Major De Renzy in THE LANCET of Sept. 7th. Dr. Muir's observations are to the effect that, whilst much requires to be done in remedying possible defects in the details of water-conservancy, yet, on the whole, the European troops in India are provided with water adequate in quantity and wholesome in quality, and that the amount of disease traceable to defects in water-supply has been exaggerated. Mr. De Renzy, on the other hand, is of opinion that "the supply is, with very few exceptions, so obviously exposed to contamination, that its use is attended with the gravest dangers to health." As, after eight years' regimental experience in India, I resumed my original chemical pursuits, and have been, for the last two years, charged with the duty of examining the water-supply of a large portion of the Madras Presidency, I may be permitted to give my testimony on the point.

It must first be remarked that Mr. De Renzy does not deny the statement made by Dr. Muir; his argument is that the water is exposed to possible contamination, and that, certain diseases of ill-ascertained origin being prevalent, they may be reasonably attributed to pollution of the water-supply. Having determined that the enteric fever of India is caused by excrement-tainted water, he proceeds to lay down that three-fourths of all deaths from fevers, and all the deaths from dysentery and diarrhœa, are caused by impure water; also that "the enormous quantity of impure water that men drink in the hot weather sufficiently explains the special prevalence of typhoid as well as of dysentery and diarrhœa at that season." It is hardly worth while refuting with argument conclusions which are simply jumped at; suffice it to say, that it is in no way proved that the drinking-water of soldiers contains impurity likely to cause either of the above diseases. It is taken for granted, because water is drawn by means of a leather bucket and conveyed in leather bags, that it is necessarily polluted—an assumption which I cannot grant; also that the wells are constantly exposed to pollution, and contain large deposits of filth—an assertion which is in no way confirmed by my special investigations on the subject. I admit that for various reasons it would be advantageous to raise water by machinery and distribute it by pipes, were there the slightest prospect of this system being cheaply and efficiently maintained, but I have very strong doubts if this measure would produce any improvement in health commensurate with the heavy outlay. The system of water-carrying used in cantonments is that which is best adapted for use during the movements of troops, whether in the course of relief or on actual service, and as the establishment of water-carriers must be kept up, there is great economy effected by utilising them in cantonment. There is not the slightest evidence that carriage in skins has any bad effect on water, whilst, on the other hand, it is the custom amongst officers to keep their drinking-water preferably in a leathern bottle, or chagul, from the pleasant coolness imparted by the porous leather. I consider that everything in reason has been done for the water-supply, if it is drawn and conveyed in the following manner:—

1. Water to be drawn from the well by the indigenous mechanical means of the Persian wheel, or the large leathern bucket, in either case worked by bullock-power.

2. To be conveyed to barracks as at present, either by puckally bullocks (a bullock carries a pair of leathern bags or pukhals, each holding about twenty gallons), or in water-carts.

3. The water to be stored in porous pots (chatties) with covers.

4. Filtration, when necessary, to be effected by means of one large sand filter for the whole corps. Filtration through a foot or two of clean sand is sufficient for all practical purposes. The barrack-room water-pots would be filled from this filter.

I have not found that there is any practical inconvenience in the wells being open. I have never seen refuse or garbage in wells actually used, and the only case in which I can imagine the possibility of a dead dog being found in a well is in that of a water-hole, which only becomes a well in the rainy season, and at other times is used as a refuse depôt. Such a case could not occur unless the medical officer or the quartermaster grossly neglected his duty. I have always found the wells used for British troops to be fairly conserved, and without any certain signs of pollution in the water. Practically the only pollution to which a well is subjected is that of drippings from the puckally's feet when the well is so badly constructed that he is obliged to stand within the parapet, or that of bones or dung dropped by crows or other birds. The pollution thus caused, when distributed over the thousands of gallons often taken daily from it, must be, and practically is, infinitesimal. With acts of mischief I cannot deal; they are matters of police, and practically are most rare. In order to avoid all these sources of possible pollution (though evidence is wanting that any of them would produce disease) nothing is required but the ordinary exercise of the medical officer's authority. In nearly every station where the consumption of water is sufficiently large to justify the expense, indigenous mechanical appliances for raising water are in use, and a very slight increase of the quartermaster's subordinate establishment would suffice to guard the principal wells, and exercise the necessary supervision over the conveyance and storage of water. Some galvanised iron network would prevent birds from entering the well, or crows from dropping bones into it.

I would most strongly deprecate the establishment of pumps and waterworks for cantonments in India, except under peculiar circumstances. The experiments that have been made in this line of sanitary engineering have been of the most discouraging character; I may even say that they form a notable feature in the great waste of public money made under the auspices of sanitation. We have a knack of always missing the happy mean in our military arrangements; we either stifle men in dens or else house them in palaces as uncomfortable as they are costly; we either take no care about their water-supply or we squander lacs of rupees on abortive waterworks. There is no doubt, however, that very fair progress was being made before the rise of what I may term the sanitary mania, and we had arrived at a very satisfactory general condition of health by 1860. Since then we have done little else but waste money on extravagant schemes which have been entirely without practical advantages, and we have added what I may term the sanitary exploitation of India to the military and commercial exploitations which have already pauperised the country in the name of civilisation. The concluding paragraph of Mr. De Renzy's letter points to the infliction of "pumps and filters and condensers" on the native population of a cantonment as well as their establishment in barracks; that is to say, on the chance of saving one British soldier from the risk of enteric fever, thousands of his already heavily-taxed fellow-subjects are to be again heavily taxed under municipal regulations in order that in his rambles he may always come across drinking-water of guaranteed purity.

I have found that throughout the stations of two-thirds of the British troops in this presidency, visited by me during the course of my Indian service, the water-supply has been generally quite as good as it is possible to obtain without an outlay incommensurate with the very problematical advantages expected. It may be said, however, that my experience, being confined to Madras, cannot be taken as evidence on the water-supply of Bengal. But I have had the opportunity of studying the reports on the four years of water-analysis in Bengal, and the advantage of visiting a Bengal station very much written about by the Indian sanitary authorities of that province. The former has enabled me to confirm fully Dr. Mouat's opinion that, "with few exceptions, the supply is adequate and wholesome"; and the latter to go even further than him in deprecating the exaggerated ideas current on the state of Indian water-supply generally.

The reports on the waters of Bengal cantonments are, unfortunately, of the most unsatisfactory description, as neither the superintendent of the analyses nor the analysts themselves appear to have had any chemical education beyond that obligatory on every medical officer. As far as I am able to sift the real facts out of the figures and remarks given, the water-supply is of good quality except in those stations where a naturally saline subsoil has imparted brackishness to the water.

My personal experience of Bengal is confined to a town which I visited expressly to examine a water-supply stated to be entirely polluted, not only by fæcal, but also by choleraic, matter. The following are a few of the remarks made by sanitary authorities on Pooree:—

"The water-supply of that town is polluted to the last degree by choleraic matter. ..... The water in the tanks and wells of Pooree is loaded with choleraic matter in the greatest degree." (Circular by F. J. Mouat, M.D., Inspector-General of Gaols, March 4th, 1868.)

"The sources of water-supply have been polluted from time immemorial. ..... I believe most of the tanks to be in the same condition as that now indicated [i. e., evolving noxious gases]; and I have no doubt that by percolation the water of almost all the wells in the city is very seriously contaminated." (Report on Pilgrimage to Juggernauth in 1868, by David B. Smith, M.D., Sanitary Commissioner for Bengal.)

I had my suspicions that these descriptions were highly coloured, as the language of Indian sanitary science is notoriously hyperbolical. Thus Dr. David B. Smith, wishing to express the fact that the streets of Pooree were ill-smelling, uses the following terms: "There is a universal dearth of oxygen; carbonic acid, ammonia, carburetted and sulphuretted hydrogen abound to a poisonous degree. Words fail me as I endeavour to depict the whole truth." I need hardly remark that there is not the slightest evidence of Dr. David B Smith's having ascertained even the presence, much more the quantity, of the above gases in the atmosphere. And considering that Pooree is on the seashore, swept by a constant sea breeze, I have my doubts as to whether analysis would detect any notable deficiency of oxygen. The town is not dirtier than the average of purely Indian towns.

But returning from the quality of the air to that of the water, I found, on analysis of typical tank- and well-waters, that there was no evidence whatever of sewage pollution, and that the natural water-supply, though generally brackish, was as good as that in any town on the Eastern coast from Madras to Calcutta, both included. I have a strong impression that the only foundation for the assertion that the waters are "loaded with choleraic matters" is that the more brackish waters contain much chlorides: cholera-stools contain chlorides, the Pooree waters contain much chlorides; the inference is obvious. Such reasoning, however absurd, is quite on a par with the assertion that there is a universal dearth of oxygen in the air of the town.

It will be seen that my personal experience of Bengal corroborates Dr. Muir's statement that the condition of the water-supply has been exaggerated, in a great measure owing "to the water question being mixed up with theories of cholera and other epidemic diseases." I will go so far as to say that, in my experience, it is exaggerated in order to make it fit in with theories of cholera and other epidemic diseases.

Bangalore.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

CASE OF PRIAPISM LASTING SIX WEEKS; RECOVERY.

(Under the care of Mr. HIRD.)

PERSISTENT priapism is sometimes met with in cases of disease or injury of the spinal cord or cerebellum, but apart from morbid conditions of these organs it is exceedingly rare. Many works devoted specially to diseases of the male genital organs do not even allude to this condition, and in no work on surgery is any but a very brief mention made of it. In THE LANCET, vol. i. 1867, p. 207, a case is reported which was under the care of Mr. Birkett in Guy's Hospital; and at the same place three other cases are referred to, the first of which occurred in 1824 in the practice of Mr. Callaway, and which lasted for nearly three weeks;* the second was for four days under the treatment of Mr. John W. Tripe of Hackney, and subsequently for four months under the care of Mr. Luke in the London Hospital;† and the third, which lasted over a month, was a patient under Dr. Handfield Jones at St. Mary's Hospital in the early part of the year 1867. Since then two other cases have been recorded in the *New Orleans Journal of Medicine*: the first in January, 1869, by Dr. J. R. Smith; the second in the July number of the same year, by Dr. Hargis. Dr. Gross refers in his work "On Surgery" to a case of this kind which he saw many years ago. In the majority of the cases the priapism seems to have been due to excessive coitus; but in the subjoined case no such exciting cause was present. In some, moreover, there was increased sexual desire for some time after the onset of the disease; but in most of the cases this did not exist. The pathology of this condition is very obscure. By some it is considered to be the result of extravasation of blood; by others to be due to nervous reflex irritation. The effect of treatment seems to indicate the latter as being the more correct; for incisions into the penis, to let out the extravasated blood, have not been productive of any good result, whereas the administration of bromide of potassium has, in several instances, been followed by relief and gradual subsidence of the symptoms.

For the notes of the following case we are indebted to Dr. Mitchell Bruce.

C. C——, aged fifty-five, an Irishman, and a porter at Covent-garden, was admitted into hospital on Sept. 28th, 1872. The patient, according to his own account, had been a healthy man, with the single exception that three years ago he suffered from priapism for three or four days, the affection coming on suddenly in the day time, and gradually passing off. The priapism was accompanied by severe pain in the penis, but by no symptom in the back, legs, bladder, or bowels. Since the time indicated the patient had not suffered from any such disease in any degree until the present. The patient was confessedly a drunkard; every day, or every second day, he was drunk upon rum; he never had less than four quarterns a day. He also stated that he had neither lately nor at any time been given to sexual excess. On Sept. 23rd, about 4 A.M., the patient awoke to find his penis erect and painful, after no provocation whatever; and this condition continued up to his admission.

On being admitted, the patient was found to be suffering from well-marked priapism, with constant pain in the penis. The organ was very tender, but there was no redness at any spot on it, or in the neighbourhood, nor was there any distortion or want of uniformity in the considerable and general unnatural enlargement. The patient lay on his back, with his knees drawn up, to prevent the contact of the bedclothes. The pain in the penis prevented sleep. There was no pain in the back, no pain or other abnormal

* London Medical Repository, 1824, p. 286.
† THE LANCET, July, 1845.

symptom in the legs; micturition was attended with little or no discomfort; the bowels were somewhat constipated. Ordered a purgative and hot fomentations to the penis.

Sept. 30th.—Condition unchanged. To take ten drops of tincture of belladonna every six hours, and ten drops of antimonial wine in an ounce of white mixture three times a day.

Oct. 3rd.—No alteration; no sleep has been obtained. To have at once five grains of calomel and six grains of compound extract of colocynth, and a pill containing five grains of camphor every night.

7th.—No change. The purgative pill did not act much. Ordered twenty grains of bromide of potassium three times a day.

8th.—Repeat the calomel pill.

9th.—Condition the same as above. To take at night fifteen drops of tincture of belladonna in an ounce of camphor mixture.

10th.—Still sleeps badly; no diminution of the priapism. To have a draught containing twenty grains of chloral hydrate at bedtime. A small quantity of extract of belladonna to be rubbed into the skin of the perineum.

19th. — Symptoms still the same. The patient was seen to-day by Mr. Hancock and Dr. Headland. Ordered to have an eight-grain compound aloes pill at once; and to take one-eighth of a grain of tartarised antimony and a drachm of the solution of acetate of ammonia in an ounce of camphor mixture every four hours.

22nd.—Condition unaltered. To have five grains of iodide of potassium three times a day (this was not administered until the 29th).

25th.—The patient is conscious of some relaxation of the erect feeling, and the pain is less.

29th. — Both the priapism and the pain have nearly disappeared. The patient wishes to sit up. The appetite is good, as it has been throughout the disease.

30th.—Last evening, about nine o'clock, half an hour after taking the first five-grain dose of iodide of potassium, the patient was seized with all the symptoms of extremely marked iodism. He did not sleep during the night. This morning the symptoms are still present, but evidently subsiding. There is no salivation nor eruption on the skin. Pulse 68, regular, and small. The penis is no longer erect, but although flapped over upon the thigh it is quite firm to the touch. It is free from pain.

Nov. 1st.—The symptoms of iodism have perfectly subsided.

4th.—Penis still abnormally stiff, with slight pain at the point, and tenderness. The patient volunteers the statement that he has "rubbed the point," but could induce no erection by the experiment.

6th.—Condition improving; relaxation not quite complete.

8th.—The patient is out of bed; there is still stiffness of the penis; no erection has occurred.

11th.—The penis is perfectly lax; no erection. The patient was discharged to-day cured.

It must be added that on one occasion, the date of which was not recorded, the patient was put under the influence of chloroform without effect upon the priapism.

KING'S COLLEGE HOSPITAL.

A CASE OF RED SOFTENING OF THE BRAIN.

(Under the care of Dr. BEALE.)

FOR the following notes we are indebted to Mr. Francis Warner, M.B.

The subjoined case was a well-marked example of that form of cerebral degeneration called red softening, and was probably due to the intemperate habits of the patient. The extensive disease of the vessels was no doubt primary, and either minute ruptures occurred in the capillaries, or the so-called atheromatous abscesses in the aorta discharging their contents into the blood-current may have caused embolism in the capillaries and infarctions of the affected parts.

The patient, a married woman, aged twenty-five, was admitted on November 25th. The following history of the case was obtained from the husband by Dr. J. H. Philpot, house-physician:—Both parents alive and healthy; no history of consumption in the family. She is married, and has four children, all healthy. She seems to have enjoyed good health till lately, but about a year ago she began to take to drinking hard, chiefly gin, being almost constantly in a "muddled condition." The present illness commenced about three months ago with anorexia, retching, and vomiting; at the same time a "scaly rash" appeared upon the skin, then blebs formed, burst, and scabbed over. She gradually got worse, and began to be changeable in temper and fretful; would lie about in a listless manner, and was very irritable when disturbed. Her memory became impaired, and she was constantly affected by spectral illusions. These mental symptoms became very marked about two months ago. For the last three weeks she has been almost confined to bed, gradually losing power in her limbs, and since the 10th inst., she is said to have been quite powerless. The bowels have not been open for a fortnight, except once slightly. During the last week she has complained much of headache and pains in the limbs. For the last three days she has been more or less unconscious; lying with her eyes closed and refusing to take food, but drinking eagerly. She has never been violently delirious, but on one or two occasions has tried to get out of bed.

On admission to the hospital, the following notes were taken:—Patient is a stoutly-built woman, apparently beginning to emaciate. She lies in bed on her back, generally almost motionless, sometimes a little restless, especially when being examined. Face flushed, skin moist, but no sweating. Head turned away from the light, eyes closed. She resists attempts to raise the eyelids, but when this is done, the eyes are seen to be injected and watery; pupils contracted but equal; they act sluggishly to light. There is well-marked divergent strabismus, varying in amount from one minute to another. Ophthalmoscopic examination found impracticable. A careful examination of the heart and lungs shows no signs of disease. There are some sores on the legs and back; there is very little ulceration, if any, and some of the sores have become crusted over; they much resemble rupia. There are also some old cicatrices on the skin of the abdomen. A slight "tache cérébrale" may be developed by drawing a blunt point gently over the chest or forehead, but it is not well-marked. Breathing is noisy and stertorous, respirations sixteen to the minute. Pulse small and slightly irregular, 130. Tongue furred, dry at tip and centre; no sordes on the teeth. There is much difficulty in getting patient to swallow any food. Urine cloudy and loaded with lithates, acid, specific gravity 1020; no albumen. Thirty-two ounces were drawn off with the catheter. Temperature 98° F. Was ordered an enema to relieve the bowels, and four grains of calomel to be placed on the tongue.

Nov. 27th.—The patient is almost unconscious, and cannot be made to speak. She attempts to protrude the tongue when repeatedly told to do so. The divergent strabismus is more marked, and continues to vary from time to time. She occasionally utters a few incoherent words. The breathing is more stertorous, and she is evidently sinking. Pulse 138; temperature 100° Fahr. Died quietly at night.

Autopsy, made by Dr. KELLY, *twenty-four hours after death.*—The brain-membranes, and superficial portions of the brain were healthy. The arteries at the base were atheromatous but pervious. On opening the ventricles a large cyst of the choroid was found on each side. Beneath the lining of the ventricle, and seen through it, were small patches of red softening placed symmetrically in each corpus striatum and optic thalamus. They were close to the surface, each about the size of a pea. A similar patch was found on the medulla oblongata, near the floor of the fourth ventricle. Microscopical examination showed the capillaries of the diseased portions to be extremely varicose; weight of brain, 46 oz. Heart flabby; valves healthy; weight, 11¼ oz. Aorta atheromatous. Kidneys lobulated, capsule adherent, cortex diminished; weight of the right kidney, 6½ oz.; of the left, 5¾. Liver large, smooth, and fatty; weight, 75 oz.

BELFORD HOSPITAL, FORT WILLIAM, N.B.

EXTRAORDINARY CASE OF PIN-VOMITING, ETC.; RECOVERY.

(Under the care of Dr. G. WRIGHT HUTCHISON.)

CASES like the following occasionally come under the care of the medical man, and generally occasion much doubt and scepticism. There can be no doubt that the majority, if not all, are impositions. It would be interesting to know whether the patient in this case was left-handed, for it is to

be remarked that the needles were discharged from those parts of the body into which they could be best introduced by the left hand—e.g., behind the left ear, from the left nostril, and right forearm. Further, the fact that all the pins were bent at an acute angle seems to point to an intentional bending rather than an accidental one produced by biting the pins, for it would hardly be possible to bend a pin at an acute angle by means of the teeth only.

Catherine M——, aged twenty, a nurse-maid, was admitted on August 30th, 1872. The patient stated that, while employed fixing clothes to a line the previous day she, having four or five large pins in her mouth, had accidentally swallowed them. She complained of a constant jagging pain in the precordial region. Having remained in hospital eleven days, during which time she vomited five pins (an emetic having been administered every second day), she was dismissed cured.

After being four days at home she again experienced the jagging pain in the precordial region, and her mistress having administered large quantities of warm water, she vomited two pins. From this time her stomach remained very irritable, and she was constantly vomiting—having great pain while retching—till on October 20th she vomited no fewer than twenty-three pins. For nine days after this date a needle came out at a spot over the origin of the sterno-cleido-mastoid muscle behind the left ear—one needle each day. On September 20th two needles came out of the left nostril in succession, each needle being in three pieces. Blood flowed freely from her nose and mouth.

On October 26th she applied for re-admission into hospital, which was granted. On the first two days of her residence in hospital a needle came out each day behind the left ear. On November 2nd, at a spot on the front of the right forearm, about two inches from the elbow-joint, a needle came out, the broken-off point of which issued at the same spot next day. On November 4th another needle, minus the point, came out at the same spot. She remained in hospital for some weeks after this date, and the irritation having left her stomach, and her general health being excellent, she was dismissed, returning to her service, and, so far as is known, having kept quite well since.

She is and always has been a strong healthy girl, without the slightest tendency to hysteria. Seventy-five pins in all were vomited, all of which have been carefully kept. The pins are such as are sold by weight, not in paper. They are all quite clean and bent at an acute angle. One of them is what is called a safety pin. It came up in three pieces. The needles are blackened and slightly eroded. Two of them are threaded, the threads being, in each instance, about three inches long. Before a needle made its appearance pain was felt, shifting along till the needle made its exit. Thirteen needles in all came out. Of the nine which issued behind the ear, eight came out about an hour after breakfast, whilst the ninth appeared an hour after dinner, probably from the action of the muscles of the jaw.

The girl was repeatedly cross-examined with a view to ascertaining how the pins and needles came to be swallowed. Except in the instance of the five pins swallowed while hanging up clothes to dry, she is not aware of ever having swallowed pins. She had, however, been in the constant habit of putting pins into her mouth from childhood, and often fell asleep, after undressing the children at night, with half-a-dozen pins in her mouth. Her present mistress said that she had observed the habit in her nurse-maid, and that one morning she had found the girl asleep with half-a-dozen pins between her cheeks and her teeth. The fact of all the pins being bent is a curious one. Probably she would chew them, as it were. She has a beautiful set of teeth.

The history of the case is almost incredible, but, from what was observed in hospital, and from the evidence of her mistress, which is thoroughly reliable, there can be no doubt about its being *bonâ fide*.

ALTRINCHAM HOSPITAL.

LACERATED WOUND OF THE ABDOMEN; PROTRUSION OF INTESTINE AND OMENTUM; RECOVERY.

(Under the care of Mr. T. TORRINGTON BLEASE.)

THE danger of a penetrating wound of the abdominal parietes is increased by the protrusion of any viscus, and is greater when there is hernia of the intestines than when omentum only escapes. The prognosis is, however, rendered much more favourable by a speedy return of the bowel or omentum, and by keeping the parts at rest for some time afterwards. But the treatment does not end with the healing of the wound, for it will be necessary to support the wound with some form of bandage or truss for many months or even years, and the more extensive the wound the greater the necessity for support.

J. B——, aged forty-two, a thick-set, sallow-complexioned man, was admitted at 8 P.M. on Sept. 22nd, 1872, having been brought three miles in a cab. He had received an hour previously, from the shaft of a gig, travelling at the rate of twelve miles an hour, an irregular lacerated wound of the abdomen, measuring ten inches in length, and extending from the anterior superior spine of the ilium, on the right side, across the lower part of the abdomen. There was no collapse, although the hæmorrhage had been considerable, nor was there any necessity for the application of a ligature.

There was a large protrusion of omentum and intestine; in fact, the patient appeared as if the whole front wall of his abdomen had been removed. With the assistance of Mr. Atwell, the patient was placed under the influence of chloroform, and with some difficulty the intestines and omentum were replaced. The wound was then closed with eight carbolised catgut sutures, and supported by strips of adhesive plaster, and a pad of cotton-wool secured by a flannel bandage. The patient was allowed brandy and milk, and the only medicine employed was a half-grain of morphia suppository night and morning, and one grain of opium every four hours, for three days, when the suppository was discontinued, and the opium only taken occasionally. The temperature remained normal, and the pulse never exceeded 80; the patient continuing to improve for six weeks, when a large abscess formed just above the wound, and opened externally.

The man left the hospital ten weeks after admission, perfectly well, having been supplied by Messrs. Wood, of Manchester, with a very good elastic belt having a pad affixed.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JAN. 7TH, 1873.

MR. JOHN HILTON, F.R.S., PRESIDENT, IN THE CHAIR.

THIS being the annual meeting, a report of the Society's condition and the balance-sheet were read by Mr. HULKE, and adopted. A new bye-law, "that the trustees shall be *ex officio* members of the Council," was passed.

Dr. PEACOCK then exhibited a Diseased Heart. The specimen was taken from a woman, aged forty-five, who had suffered from repeated attacks of rheumatic fever; the first occurred when six years of age, and the last a few years ago. During this time she had had constant cardiac symptoms, suffering from obstructive and regurgitant aortic and regurgitant mitral disease. About fourteen days after admission her temperature rose; this could not be explained. One evening she became delirious, and the next day she was found to be paralysed on the left side; there was no aphasia. At the autopsy the aortic valves were much diseased. Only two valves were present; one was much larger than the other, and appeared as though three valves were blended into one. This segment was very shallow, and on the edges there were soft vegetations. At the mitral valve the chordæ tendineæ were quite torn through; they had softened and given way. In the brain embolism of the middle cerebral artery, on the right side, was found. This condition, the presence of four aortic valves, was exceedingly rare. Dr. Peacock had seen a small valve between two larger ones, but had never before seen this condition.

Dr. PEACOCK showed a Liver with the portal vein blocked by a clot. The patient was a man aged forty-five; he had been a teacher in a school, and was of temperate habits. On admission he was suffering from ascites, the lower limbs also were swollen; he had much sickness and

diarrhœa. Under treatment the latter passed away, but the abdomen increased in size; he had a slight icteric tint, and nodules were felt on the liver. He was supposed to have carcinoma of the liver. The ascites increased, and he was tapped, eighteen pints of fluid being drawn off; no tumour was then felt on examining the abdomen. The abdomen remained large and re-filled. He was again tapped. This was repeated a third time in about fourteen days after. The patient gradually sank from exhaustion. The liver was small, but did not look like ordinary cirrhosis; there was a firm adherent clot filling the portal and splenic veins. Dr. Payne, who made the post-mortem examination, said the liver weighed forty-five ounces, was rough and granular, and had a somewhat cirrhotic appearance. The clot consisted of firm mottled coagulum and fibrine, closely adherent to the walls of the veins.

Dr. MOXON asked if this was a case of true cirrhosis, or had the liver undergone the change called chronic atrophy. The symptoms of the two diseased conditions were much alike. He had seen a few examples of chronic atrophy; in one case the liver weighed thirty-two ounces, and there were signs of hepatic ascites. It was difficult to explain the amount of ascites in such cases, as the portal vein was not apparently blocked up, whereas in cirrhosis there was a true mechanical causation. There were on record four cases of simple chronic atrophy, leading to blocking up of the vein. Did this case come under that category? Was the spleen small? He had seen it so small as to weigh only two ounces and a half in a case of cirrhosis.

Dr. PEACOCK replied that Dr. Payne had not completed his examination. He had described the liver-tissue as hard and cirrhotic. The spleen was very hard and large, thirty-four ounces and a half in weight. The symptoms were like those of cirrhosis; there was slight hæmatemesis.

Dr. CHARLES CARTER showed a Heart with a Supernumerary Pulmonary Valve. The specimen was taken from a boy, aged a year and four months, who had died of bronchopneumonia. The valve was situated a little below the line of attachment of the two between which it was placed; it had a distinct corpus Arantii.

Dr. J. THOMPSON DICKSON exhibited some microscopical specimens of the Spinal Cord, and some drawings illustrating the changes which occur in the spinal cord from disease and those which accompany muscular atrophy. He referred to the statement made by Vulpian, who had found in a spinal cord taken from the body of a person who had suffered amputation of a leg some years before death areas of degeneration, similar to those found by Dr. Lockhart Clarke in progressive muscular atrophy. He thought Vulpian's case must have been an exceptional one, for there was no correspondence whatever between the appearance of the cords of persons suffering from muscular atrophy and those of persons who had undergone amputation of a limb. The impression, which had obtained some authority upon the statement of Vulpian, that the changes in the cords of patients who had suffered from muscular atrophy was the result, and not the cause, of the atrophy, was erroneous. Dr. Dickson then showed some drawings copied from those lent him by Dr. Lockhart Clarke, which represented the changes in two cords from patients who had suffered amputation (one of the arm, the other of the thigh) many years previous to their death; also drawings of the sciatic nerves from the latter case. Dr. Lockhart Clarke's drawings were from portions of cords and nerves supplied him by Dr. Dickinson, of St. George's Hospital. In one of Dr. Lockhart Clarke's cases there was some wasting of the anterior grey substance, and a change in the cells of the same part, which rendered them less numerous and less distinct. In the other case there was atrophy of the posterior column on the side corresponding to the amputation. In the specimens exhibited by Dr. Thompson Dickson there was wasting of the anterior grey matter of the side corresponding to the amputation, and the cells in the same region were less numerous than on the opposite side, exhibited corrugated margins, and were pigmented. The sections, however, presented no resemblance to those of the cord from a case of progressive muscular atrophy, which Dr. Dickson exhibited, and in which the nerve-cells had almost altogether disappeared.

Dr. HOWSHIP DICKINSON said he was much interested in this subject, and had examined many cords. After the amputation of limbs constant changes were met with in the spinal cord. These were—(1) wasting of the sciatic nerve (if the lower extremity was removed); (2) wasting of posterior root going to cord; (3) wasting of posterior column on the same side as the lost member; patches extending up the cord, and, in amputation of the arm, as far as the decussation; in the grey matter slight wasting on the same side, but no alteration of cells. In one of his cases the man lived fifty-three years after he had lost the limb. He proposed that Dr. Dickson's specimen be referred to a committee for examination.

Mr. GAY showed a piece of Peritoneum with a pouch in it, removed from the pelvic region of a woman sixty-two years of age, and gave the following account of the case. The patient, who was very fat, was seized in September with vomiting; she was constipated, and there was no pain in the abdomen. He saw her on the fifth day. The vomiting had persisted, but was not fæcal. The abdomen was tense; the tongue dry; pulse quick. A small tumour had been detected in the femoral ring. An incision was made and the parts explored. There was no hernial sac, but a portion of fat outside the ring, and grasped by it; the ring was incised, and it was returned. The vomiting ceased after six hours. After three days a severe pain in the abdomen came on, and she died from syncope. At the autopsy it was found that there had been a hernia; the sac had receded, and the vomiting had forced through the ring a portion of fat attached to the outside of the peritoneum. Death resulted from obstruction of the descending colon; the transverse and descending colon were attached by bands; the lower part of the ileum had given way, and fæcal matter had been effused into the peritoneal cavity.

Mr. GAY then showed a Varix removed from the upper part of the thigh.

In reply to Mr. Hulke, Mr. GAY said a pouch, rather than a hernial sac, had been formed; this had opened the ring, and when it receded the piece of fat had been forced down.

Mr. HULKE said he had asked the question, thinking the case might have been one of reduction *en masse*. This was said in some text-books only to occur in inguinal hernia; but this was not so, as he had recently seen four cases of reduction *en masse* in femoral hernia.

Dr. DOWSE exhibited a Colon strictured in the descending portion. The specimen was taken from a woman who died in Highgate Infirmary. She was admitted suffering from obstruction of the bowels; every attempt had been made to overcome this before he saw her. He proposed an operation, which was objected to. At the end of nine days the patient was in a very exhausted state, and on proposing again to operate, she consented. He opened the colon in the usual way: on passing the finger downwards there was no obstruction; but upwards there was an obstruction. No relief followed the operation, and the patient died six hours after. At the post-mortem examination the peritoneum was for the most part healthy; no lymph was effused. The transverse and descending colon were enormously distended; the ascending part was bound down by recent peritonitis, and there was there a large extravasation of fæcal matter. In the descending colon there was a growth of a carcinomatous character.

In reply to Dr. Gibbon, Dr. DOWSE said that the ascending colon had ruptured from inflammation.

Mr. SPENCER WATSON showed a Leg from which numerous recurrent tumours had been removed. These had been exhibited to the Society at several meetings during the last two years, and at last the patient had consented to allow the removal of the limb. The specimen was referred to the Morbid Growth Committee.

At the close of the meeting a vote of thanks to the president and the retiring officers was passed.

Mr. HILTON, in reply, said that before thanking the members for their kindness expressed towards himself, he desired to make a brief allusion to the work done by the Morbid Growth Committee. He did not think their duties and responsibilities were sufficiently appreciated. These gentlemen were selected as experts in their special knowledge, and their opinions and conclusions were valuable to the Society, and all who were interested in the advancement of pathology. It was no mean thing to carry out those duties with a proper sense of the responsibility of their decision between differences of opinion expressed and

entertained by contributors of specimens; but truth, the result of unbiased observation, kept them to their purpose. Their decision, published in the report, acquired a widespread and well-recognised authority. He proposed that the thanks of the meeting be cordially offered to them. He was gratified to know that he had fulfilled the duties of president without discredit to himself or deterioration of the Society. He had looked upon his election to that distinguished position as eminently complimentary and almost undeserved, for he had for many years been absent from their meetings: still he had watched the progress of the Society with much interest. He was greatly and gratefully indebted to the Society for the acquisition of a large amount of pathological anatomy through his attendance at the meetings; for all must admit that there is no surer way of obtaining a knowledge of a fact than through the medium of the eye. Reflecting on the distinguished career of the Society, he had thought it well to ascertain if he could discover any suggestion made by the founders which might have directed it towards its present high position. At the first meeting of the Council in 1847, he found this expressed: "That the Pathological Society should devote itself specially to the cultivation of Pathology." It was not merely to pathological anatomy, but to pathology, using the first as a stepping-stone with the object of securing a collection of facts, and the hope and expectation of indelibly grafting thereon a code of laws interpreting and regulating the causes of disease. This exemplified a remarkable forethought and pre-knowledge on the part of the founders, which time and experience had fully justified. The study of pathological anatomy was one of the youngest branches of medicine, and its recent growth had surpassed all others. Never before the establishment of the Society had this subject received in this or any other country the attention of so many minds conjointly in the harmonious purpose of improving and enlarging the scientific resources of our profession. The reputation of our reports was great: they contained a collection of well-observed facts severed from fancy and unchangeable by time or added experience; they were constantly appealed to as absolutely reliable, on all authoritative lectures delivered at our public medical or surgical institutions; and he thought he might say that not a single standard book worthy of serious reflective attention was published without the author having availed himself of the facts stored up in them. The Society had increased in numerical strength from 106 to 500; it was constantly growing larger, and necessarily older, yet it showed neither infirmity nor garrulity; on the contrary, it manifested on all sides a more youthlike vigorous energy, more resolute life-giving determination to dive deeper and deeper into the labyrinthine and obscure recesses of deteriorated structures tending to death or functional error, thus enabling us to see and understand the beginnings of disease—the Pathogenesis—a sure and certain recognition of a comprehensive pathology. The duties of president, under the guidance of the Council and the secretaries, had been made agreeable and easy; the necessary official work had been done unselfishly by each and every one, with a persistent desire to contribute to the good of the Society.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JAN. 1ST, 1873.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

ANNUAL MEETING.

THE following gentlemen were elected Fellows:—H. M. Allen, M.R.C.S.; J. Braithwaite, M.D.; H. R. Hatherley, L.R.C.P. Ed.; T. C. Hayes, M.R.C.S.; W. V. Jakins, M.R.C.S.; H. A. Lawton, M.R.C.S.; J. Waters, M.R.C.S.; F. B. White, M.R.C.S.; J. H. Wilson, L.K.Q.C.P. I.

DR. BATHURST WOODMAN exhibited two forms of apparatus made for him by Messrs. Krohne and Sesemann, intended for use in cases of empyema in children.

INSTRUCTION OF MIDWIVES.

A paper by J. T. Mitchell, F.R.C.S., was read, "On the necessity of adopting laws by which the wives of the labouring classes and the poor shall have secured to them in their labours the attendance of qualified accoucheurs, female as well as male," with "Instructions to women midwives regarding their duties in all abnormal cases of labour on which they may be called to attend, when they are directed forthwith to procure the aid of a qualified and responsible medical attendant."

DR. SNOW BECK said the education of midwives was a subject well worthy of careful consideration. He considered them a necessary part of the profession; they had always existed, and would continue to exist to supply the requirements of the working classes. He understood that a clause was introduced into the charter of the Royal College of Surgeons, which gives the Council the power to examine and grant certificates of proficiency to midwives, if they should please to do so; that the subject had been brought before the Council of the College, and that some members of the Council were favourably disposed to entertain the application. It would be very desirable that the Council of the College should undertake the duty of instituting a class of better educated midwives, although many of the present midwives were very judicious and able practitioners. The great difficulty consisted in providing the means for furnishing such an education as would satisfy the probable requirements of the Council prior to admitting the women to examination.

DR. CLEVELAND thought the author had embodied some practical suggestions in his paper. If the poorer classes must of necessity be attended by midwives, it was most desirable that they should know how far they might conduct cases with safety on their own responsibility. From early recollections of the practice of midwives in the country, he could testify to the deplorable results of gross ignorance and assumption.

DR. AVELING thought the subject of very great importance, and one which must before long occupy the attention of the State. In England alone 11,500 midwives were required, and the instruction of this large number was a task beyond the reach of private enterprise.

DR. EDIS remarked that there had been a School of Midwifery at the British Lying-in Hospital for many years, exclusively for the education of midwives, and that within the last few years the class of women presenting themselves as candidates had altered very materially for the better.

DR. J. J. PHILLIPS said the importance of the subject treated of by Mr. Mitchell could not be over-estimated. He could, from personal observation, testify to the satisfactory results obtained from such an arrangement as that suggested in the paper. As physician of the eastern districts of the Royal Maternity Charity, he had about twenty midwives under his supervision, and they attended every year about 2500 cases; they were able at once to recognise any deviation from the course of natural labour, and were generally very acute in the early detection of malpresentations. The plan adopted for the education of these midwives was for them to attend two courses of lectures delivered by the senior physician of the Charity, Dr. Hall Davis, and, at the same time, to attend under the guidance of one of the district midwives a certain number of cases of labour. Dr. Davis then examined them, and if they passed a satisfactory examination, they were appointed supernumeraries to assist the appointed midwives, and ultimately each one succeeded to a district of her own. Dr. Phillips's experience of the working of the Charity was a most satisfactory one. While the midwives were taught the proper method of acting in cases of emergency, no time was lost in sending for assistance; and he could not recall a case where a patient suffered from having been left too long in labour. Probably no one would doubt the necessity of educating up to this standard all women acting as midwives. The licensing of women for the more responsible duties of midwifery practice was, however, a different question; he considered it most unadvisable to do so unless they underwent a complete course of medical education.

MR. NATH. COUTEY read a paper on

STRANGULATION OF THE NECK OF A PROLAPSED UTERUS BY A LIGATURE OF HAIR THAT HAD ACCUMULATED AROUND IT.

The author was called to his patient in consequence of a profuse discharge of blood caused by her sitting down suddenly upon the stump of a tree. Upon examination he found a tumour about the size of a walnut at the os externum. Its neck was about an inch long, and about the size of a penholder. Around this was the constricting ring

of hair. This was divided and removed, and appeared as if it had been accumulating for some time, and had been matted together by the vaginal secretion.

Reports of the Pelvis and Temperature Committees, and of the Hon. Librarian, Dr. Wiltshire, were read. An alteration in the bye-laws establishing a new order of Corresponding Fellows was proposed and carried.

The PRESIDENT delivered the annual address, in which he congratulated the Fellows upon the good work which had been during done the year, and upon the increase in their numbers and in the funds of the Society.

The ballot for election of officers then took place, and the following gentlemen were declared to be duly elected:—Honorary President: Sir Charles Locock, Bart., M.D. President: Dr. Tilt. Vice-Presidents: Mr. John Clay (Birmingham), Dr. Copeman (Norwich), Dr. H. Gervis, Dr. H. M. Madge, Dr. Playfair, and Mr. John Scott. Treasurer: Dr. Murray. Honorary Secretaries: Dr. J. J. Phillips, Dr. J. H. Aveling. Honorary Librarian: Dr. A. Wiltshire. Honorary Members of Council: Drs. W. Tyler Smith, H. Oldham, R. Barnes, J. Hall Davis, Grailly Hewitt, J. Braxton Hicks. Other Members of Council: Drs. J. Watt Black, J. M. Bright, G. B. Brodie, J. Brunton, W. H. Day, J. Duncan, A. W. Edis, J. Ellison (Windsor), Mr. J. Fowler (Wakefield), Drs. S. Day-Goss, J. R. Kirkpatrick (Dublin), D. Mackinder (Gainsborough), W. Newman (Stamford), J. B. Potter, A. A. F. Rasch, L. W. Sedgwick, Heywood Smith, Mr. H. W. Sharpin (Bedford).

Reviews and Notices of Books.

Text-Book of Physiology: General, Special, and Practical. By JOHN HUGHES BENNETT, M.D., F.R.S.E., Professor of the Institutes of Medicine and Senior Professor of Clinical Medicine in the University of Edinburgh. With 21 photo-lithographic plates. Edinburgh: James Thin. 1872.

DR. BENNETT has possessed unusual opportunities for making himself master of the subject of Physiology, and of writing a good book upon it adapted to the wants of students. As long ago as 1841 he gave a course of lectures on Histology, in Edinburgh; in 1848 he began to teach Physiology, or, as it is called in the North, the Institutes of Medicine, systematically; and, finally, in 1862 he commenced courses of instruction in Practical Physiology: so that it is only reasonable to expect that he should be fairly acquainted with all parts of this important department of medical education.

The present work is arranged on a new plan, suited to the rapid advance of our knowledge during the last few years. It is divided into three parts: the first including General Physiology; the second, Special Physiology; and the third, which constitutes the distinguishing character of the book, Practical Physiology. The greater part of the last, however, has been written by Dr. Bennett's assistant, Dr. McKendrick.

A considerable part of the first chapter, on the Chemistry of the Tissues, might, we think, have been advantageously omitted, or, rather, the more important points—as the account of the colouring matter of the blood, its spectrum analysis, &c.—might have been incorporated with the corresponding sections in the special physiology part. Judging of others by ourselves, we doubt whether any student really plods through this kind of thing. As a rule, he knows the main facts beforehand; and, if he wants to obtain further information, refers to a work on chemistry. Moreover, this subdivision prevents him from obtaining a connected view of the subject. The student who is reading the account of the blood-corpuscles on p. 61 is not likely to turn back to p. 31 for a description of the colouring matter, or to p. 10 for an outline of globulin and fibrin.

The description of the molecular elements of the tissues is, as may be supposed, well given, Dr. Bennett having devoted much attention to the subject. He propounds and supports by various examples the doctrine that the development and growth of organic tissues are owing to the successive formation of histogenetic and histolytic molecules; and he is as confirmed a believer in abiogenesis as Dr. Bastian, maintaining that bacteria, vibrios, and most infusoria are formed by the mere coalescence of molecules, and not from ova or spores—a doctrine that may be true, but, dare we say it, wants further proof.

Under the head of the Physical Properties of the Tissues we think, again, many pages might have been left out without loss. Surely no student of physiology who has passed a good preliminary examination requires to be told the ordinary laws of optics, the construction of the various electric batteries, or the properties of magnetism. Such information might be legitimately introduced in an article in an encyclopædia, upon which Dr. Bennett states his treatise was originally founded; but it now takes up space that might have been better devoted to other topics.

The Special Physiology, or physiology proper, occupies about 260 pages, and is well though rather curtly given, leading the author in many places to make general statements that require qualification. Thus, opening the book at random, we find under the head of Respiration (p. 231) that the quantity of carbonic acid excreted is greater in adults than in childhood and advanced age. That is a statement that requires qualification: weight for weight, children excrete more carbonic acid than adults. On the next page it is stated, on the authority of Davy, that the temperature of arterial blood is one or two degrees higher than venous blood. Here, again, a qualification is necessary: Claude Bernard has shown that the hottest blood in the body is that of the hepatic vein. On page 228 it is stated that the amount of air inspired ranges from twenty to twenty-five cubic inches. On page 235 it is stated that an adult man inspires and expires during tranquil respiration thirty cubic inches of air every respiration. These, however, are but trifling faults, and we must say that the general execution of this part is such as to render it a very reliable guide to the student.

It is the third part which will be found most useful to the majority of students, and it is indeed quite a novelty. The principal points given are the mode of conducting the qualitative and quantitative analysis of various animal fluids—as the blood, chyle, saliva, gastric juice, pancreatic juice, bile, urine, sweat, and fæces; the mode of preparing objects for the microscope, with directions for staining and injecting (in regard to the former, why is peroxmic acid not mentioned); and finally a very important section, which every student should work up, giving a description of the apparatus used in physiological research, and the conduct of the experiments in which such apparatus is employed. With this book in hand, and a good physiological laboratory in which to work out the experiments, the candidates at the different examining boards should acquire a degree of information on physiology very superior to that which they at present possess. Dr. McKendrick deserves great credit for his share in this part of Dr. Bennett's treatise. We must not omit to say that there are 21 plates, containing upwards of 400 drawings, which, though rather small, are sufficiently characteristic of the objects represented. There is also an excellent index.

Miscellaneous and Posthumous Works of HENRY THOMAS BUCKLE. Edited, with a biographical notice, by HELEN TAYLOR. In 3 Vols. Longmans, Green, and Co. 1872.

MR. BUCKLE, though in his forty-second year, died quite in time for his reputation. When the first volume of his History of Civilisation appeared in 1857, the novelty rather than the originality of its views, the intrepidity, not to say

the self-confidence of its tone, and the fluent animation of its style, carried the "reading public" away, and wafted the author to the pinnacle of notoriety, if not to the judgment-seat of authority. Dealing with general principles with a view to their deductive application to particular types of national development, he gave his more critical readers few opportunities of testing his data, while the less critical yielded a ready acquiescence in doctrines which had all the show of logical cogency and which chimed in well with the strain of contemporary speculation. At this stage of his work, in short, Mr. Buckle was at his best—his really remarkable power of generalisation having full and unimpeded sway over an area co-extensive with modern civilisation. His intellect was essentially *doctrinaire*—*doctrinaire* in its premature thirst for "principles," in its impatience of inductive research and in its peremptory conclusiveness. The god of his idolatry was the brilliant theoriser, who, from a handful of details, can evolve a general law; and he was never tired of citing the example of Goethe, who, superficial anatomist as he was, yet beat the anatomists on their own ground by first pointing out the homologous structure of the cranium and spinal vertebræ, and who, though an amateur in botany, could yet teach professed botanists the great law of metamorphosis, according to which the stamens, pistils, corolla, and calyx are simply modified leaves. Unfortunately for Mr. Buckle, his insight into the forces of which civilisation is the outcome was not nearly so perfect as Goethe's knowledge of elementary anatomy and botany, let alone the fact that Goethe's mind had received a thoroughly academic and professional training, while his English admirer was simply a keen and by no means discriminating *helluo librorum*. In a short time people began to suspect Mr. Buckle's powers, and opportunities to confirm their suspicions were soon forthcoming. He delivered at the Royal Institution a lecture on the Influence of Women on the Progress of Knowledge, in which he made his more reflective hearers open their eyes very wide, by the statement that woman's mental power being essentially deductive, her participation in man's intellectual labour was imperatively called for to supplement his too implicit reliance on mere induction! Having probably accomplished the feat of making the author of the "Novum Organum" turn in his grave, Mr. Buckle again gave the world a means of gauging him by a long review of "Mill on Liberty," in which he said that that logician's paramount claim to superiority over all antecedent philosophers was his combination of a genius for practical politics with a rare power of abstract speculation. Poor Mr. Buckle did not live to see his statement tested by his favourite's brief and not very brilliant parliamentary career. In the course of that review, moreover, he attacked Mr. Justice Coleridge for imprisoning a notorious blasphemer with a coarseness and an unfairness which evoked from the present Attorney-General a most effective and dignified rebuke. Like other *doctrinaires*, Mr. Buckle was a poor controversialist, and his almost hysterical rejoinder to his antagonist was even more conclusive against himself than the attack he had provoked. In the summer of 1861 appeared his second volume, in which he applied the principles of the first to a detailed parallel between the civilisations of Spain and Scotland, with the result of showing that, in his hands at least, his doctrine was untenable, that he had no critical knowledge of the books or authorities he relied upon, and that his conclusions were as unconvincing as the data on which he drew were unsubstantial. An exhaustive criticism of his account of Scotland, by Mr. Hannay, completely disposed of its pretensions to explain the development of the Scottish character, and his comparison of that development with the Spanish broke down at almost every point. In spite of his undoubted ability, another such volume, and what reputation he still retained as a man of letters and a thinker must have sunk yet lower; but in the following year he was cut off by a local fever, when travelling in Syria.

This sad finale to what had been a brilliant career awakened deep sympathy among all classes of readers, and accordingly the announcement of a biography, followed by the publication of his journals, was looked forward to with much interest. After the lapse of ten years, however, the biographical notice turns out to be a mere sketch of some forty-five pages, and the journals neither more nor less than a series of extracts from a multitude of authors, of all varieties of merit and weight, interspersed with occasional remarks or comments. We are let into the privacy of Mr. Buckle's study, and allowed to examine his materials and *modus operandi* as the historian of civilisation. We find—what, indeed, we expected—industry of the most exemplary kind, which nothing but a generous ambition and an intense love of knowledge and truth could have sustained; a remarkable power of seizing, and often, though by no means always, with accuracy, the salient points of a treatise or exposition, and unusual skill in utilising them for the purposes of his argument. We find, in short, many of the qualities that go to make a first-rate journalist—knowledge of facts, ready and plausible generalising power, and fluency and force of expression, but little of the philosophic mind or method that a history of civilisation requires. As an accumulation of facts, more or less authentic, the three bulky volumes before us will prove invaluable to the contributor to the daily press, and not without their use to the politician, but even in such hands his citations must be received with caution. Our readers will readily understand us when they have read his authorities and remarks on Medicine, and on the Connexion between Medicine and History (vol. i., pp. 396-7); his fragments on Physiology (vol. i., p. 550); and on Insanity (vol. i., p. 594). Even at his weakest, however, he can always stimulate thought and suggest speculation—no small service in these days, when so much is taken at second-hand, or even on trust. But, after all, his best bequest was his example, which, by its self-denying industry and manly struggle with educational disadvantages, gives the few pages devoted to his memoir a value not often possessed by more ambitious performances.

Ueber den Gebrauch des Scharfen Löffels bei der Behandlung von Geschwüren (*On the Use of the Sharp Spoon in the Treatment of Ulcers*). By Dr. MAX SCHEDE, of Halle. pp. 66. London: Williams and Norgate. 1872.

THE use of a spoon for the removal of carious bone, though of old date, was first brought practically into common use by Sédillot, and has been somewhat extensively adopted. Dr. Schede, however, recommends its use in a much larger number of cases, and a much greater variety of forms of disease, than has hitherto been recommended even by Bruns. Amongst others he thinks it should be employed in the superficial ulcerations of scrofulous individuals when the margins of the ulcer are formed by thin, undermined, and atrophied portions of skin. On microscopic examination by Dr. Friedländer, these edges were found to contain numerous round, epithelioid cells, filled with oil drops, and exceeding the white corpuscles three or four times in size. Besides these were cells containing twenty, thirty, or more nuclei. These often formed collections which, surrounded by the epithelial cells, called to mind miliary tubercles, and from their large size and non-vascularity have a strong tendency to necrobiosis. In such cases the sharp spoon may be advantageously used, instead of caustic potash or other violent remedies, to scrape out and remove all the ill-

conditioned tissue. Other diseases for which he recommends it are, the fungous degeneration of joints, caries, and necrosis of bones, the sinuses leading down to them being dilated with laminaria probes. He particularly praises it in cases of disease of the mastoid process and of the meatus externus. He has also used it with success in removing the last remaining portions of myeloid tumours of the jaw when the chief part has been excised. Lastly, he suggests its use in cases of carcinomatous tumours of the uterus, though, on general principles, and reflecting on the profuse hæmorrhage likely to occur, we should scarcely like to follow his lead. Three sketches are given of the spoon, which may be made either oval or round, to suit the convenience of the operator.

"SURGICAL" KIDNEY.

IN the report of the post-mortem examination of the body of the Emperor Napoleon, it is stated that disease of the kidneys existed "to a degree which was not suspected; and, if it had been suspected, could not have been ascertained." Commenting upon this, *The Times* says: "A man may still, it appears, die under the hands of the first doctors of the world of a great organic disease without their knowing anything about it." Unfortunately we have to plead guilty to this charge, but there is much that may be said in mitigation of sentence.

The practical surgeon only too well knows that, take what precautions he may, a certain proportion of all operations performed on the urinary organs, even, occasionally, the simplest of all, passing a catheter, will prove fatal from inflammation of the kidneys. How to recognise beforehand which are the cases destined to such a termination has as yet baffled his skill. Even near the fatal termination it is not always easy to recognise the disease with certainty. The form of kidney found in such cases, from its occurring almost exclusively in surgical practice, is frequently known by the name of "surgical kidney."

First as to the causes of surgical kidney. These may be *remote*—acting on the organ by what, for want of a more definite term, we call sympathy (that is to say, where there is no direct extension of inflammation from the bladder by means of the ureters, and no irritant present in the pelvis of the kidney itself)—or *direct*. Among the former class, come operations on the urethra, stricture, cystitis, diseases of the prostate, &c., in which there is no evidence of pyelitis or inflammation of the ureters. To the latter belong the far more numerous class of cases in which we find ureters and pelvis of the kidney dilated, decomposition of the urine, and inflammation extending directly from the source of the disease to the kidney. To this class also belong calculus in the pelvis, and those cases in which the kidney is irritated and dilated by pressure from obstruction to the entrance of urine through the thickened walls of a hypertrophied bladder. This last cause seldom gives rise to acute changes terminating rapidly in death, unless an additional irritation is applied to the kidney in the way of a violent attack of cystitis, or extension of decomposition up the dilated ureter, or a surgical operation.

The pathological changes found as the effects of these causes may be divided into the chronic, lasting perhaps for years, and the acute, consisting of a sudden aggravation of the chronic, leading, unfortunately but too often, to a rapidly fatal termination. A kidney which has suffered only from the chronic changes is found either almost normal in size and shape, or expanded over a dilated pelvis (so as in extreme cases to resemble a thick-walled cyst), according as the case is due merely to sympathetic irritation or to causes leading at the same time to obstructed flow of urine into the bladder. The capsule is found thickened and opaque, often adhering to the surrounding fat; it strips off with some difficulty, tearing the kidney substance. On section the kidney substance is pale, often somewhat mottled, and its consistence moderately tough, but both its colour and hardness vary much with the activity of the disease at the time of observation. In the dilated pelvis it will be found that the tips of the pyramids, or, in extreme cases, perhaps the whole medullary portion, have been absorbed. There is usually a little pus, but this is free from unpleasant odour, and unmixed with any quantity of mucus or blood. On examining sections of the cortex of such a kidney, we should find distinct evidence of irritation in the presence of numerous young cells outside the tubules and accumulated round the vessels. These are especially marked round the Malpighian bodies. The amount of the cell infiltration will depend entirely on the acuteness of the process and the amount of irritation present. The epithelium of the tubules is more granular than natural, but otherwise seems to take but little part in the change. The kidney thus suffering from chronic irritation may be said to be in a highly inflammable condition, requiring only a slight additional irritation to rouse its latent activity and to start changes hopelessly incompatible with life. If we examine the kidney under such circumstances, we find it large, swollen, and intensely congested; its capsule strips off easily, but often tears the kidney substance in so doing. The surface of the kidney is then in extreme cases seen to be dotted over with yellow points, varying in size usually from a millet-seed to a pea, each surrounded by a zone of intense congestion. These are found to be small abscesses, and on making a section of the organ we find often lines of pus following the course of the vessels in the pyramids. If the disease is accompanied (as it almost always is in stone cases) by dilated pelvis, with inflammation and decomposition of the urine spreading directly from the bladder, we find the pelvis filled with an abominably fetid mixture of urine, pus, mucus, and usually a little blood. Its mucous membrane is intensely inflamed, often ulcerated, and occasionally even sloughing. These changes occur more or less in both kidneys, but most frequently one side is found more affected than the other, one ureter being more dilated. Occasionally the superficial abscesses burst beneath the capsule, and a large collection of pus may form, completely surrounding the kidney. In other cases no abscesses are met with, but large tracts of the kidney substance are found of a pale yellowish tint, as if infiltrated with pus. Microscopic examination of the kidney now shows a marked granular and swollen condition of the epithelium cells. In many tubules desquamation has occurred, but these changes are evidently only secondary to those going on outside the tubules. Here we see crowds of young cells infiltrating the kidney substance in every part, before which the tubular structure gradually disappears, till we find parts of the object in which nothing but the leucocytes are to be seen. A little further on, the intercellular substance becomes fluid, and we come upon the abscess.

With such marked pathological changes what are the symptoms? In the early stage there are very few, if any, by which we can certainly diagnose the condition; and in the later, diagnosis is chiefly of pathological interest. The ordinary signs which accompany Bright's disease in its various forms are singularly absent. There is scarcely any albumen, in many cases absolutely none, and what there may be is indistinguishable from that belonging to the pus and blood so often present in the urine in such cases. Casts are correspondingly rare, and the difficulty of finding them in masses of mucus, and the rapidity with which they decompose in the putrid urine, usually render their detection absolutely impossible. The estimation of the excreted urea is also a work beyond the capacities of ordinary men, as a large proportion is frequently transformed into carbonate of ammonia before the urine is passed; and even if found to be normal in amount, experience has shown that it is by no means a certain indication of the state of the kidney. There is no œdema, no emaciation, no dryness of the skin or other sign to indicate the disease. Lumbar pain and tenderness are only present when there is severe acute pyelitis, or a calculus in the pelvis of the kidney. In fact, the surgeon is left in the position that he can only guess, by the duration of the disease and the severity of the local condition, aided by his previous clinical experience, to what extent the kidneys are likely to be affected. The condition of the kidneys occasionally found on post-mortem examination has led some very high authorities to suppose that if the irritation be removed the early stages of the disease may be perfectly recovered from. At the same

time, in cases of stone or stricture, the patient is suffering from a horrible malady, from which, unless relieved, he must infallibly die. Who can wonder, therefore, that surgeons occasionally operate on cases which they afterwards feel they had better have let alone?

When the acute changes leading to suppuration set in, the symptoms become more characteristic; but even then they are not unfrequently anomalous. They commence with a rigor, accompanied by marked elevation of temperature, and followed by profuse sweating. The rigor, instead of passing off and leaving no ill consequences (as is so often the case after operations on the urinary organs), is repeated, once or perhaps oftener. Nausea, and usually vomiting, set in; but both may be absent. The appetite fails, the tongue becomes brown, the skin is at first dry and harsh, but towards the end of the case becomes cold and clammy. The patient becomes drowsy and stupid; usually complains of nothing, unless suffering from some complication giving rise to great pain during micturition. Diarrhœa may occur; the heart's action becomes feeble; the temperature falls below normal, and the patient dies—usually comatose. Convulsions are rare, œdema does not occur, and the urine is usually secreted in moderate quantity to the end of life. Suppression is by no means common. Even in this stage the diagnosis of the disease is not always certain. It often so closely resembles pyæmia as to be mistaken for that disease; and if much diarrhœa be present, and only one rigor occur, it may closely resemble typhoid fever in many points, but it can usually be diagnosed from these by the thermometer, the temperature after the first two rigors usually remaining low, sometimes even below normal, for some days before death. Again, after lithotomy, or in lithotrity with an extremely sacculated bladder, the diffuse peritonitis, which not unfrequently causes death, may very closely resemble suppurative nephritis, especially if, as often occurs, pain is not a marked symptom, and the temperature remains low.

The subject is still capable of further investigation, and it is to be hoped that, at some future time, our knowledge of it may be improved.

SEWAGE IRRIGATION AS A CAUSE OF FEVER.

A REPORT of remarkable interest in relation to the health aspects of sewage irrigation has just issued from the Medical Department of the Local Government Board. It is by Dr. Buchanan, and refers to a reported outbreak of enteric fever in connexion with the sewage-meadows, Northampton. The circumstances of the case were as follows:—

In October of the past year the sanitary authority of the Wellingborough Union, in Northamptonshire, called the attention of the Local Government Board to an outbreak of fever which had occurred in Ecton, a parish of the union, and which had apparently originated from the Northampton sewage-meadows, which are partly situated in that parish. Dr. Buchanan, under instructions from the Board, visited the locality of the outbreak, and made inquiry concerning its source. The fever was limited to the village of Ecton, which is situated upon a hill about a mile from the sewage-meadows. It must here be premised that Northampton carries its sewage five miles away from the town, down the valley of the Nene, to a plot of ground, 320 acres in extent, near to that river, and partly within the parish of Ecton. At the time of the inquiry, the western half of this plot of ground had alone been prepared for, and subjected to, irrigation; and in the various operations to this end from 120 to 160 labourers had been engaged daily. The work of preparing the eastern half of the plot for irrigation had hardly been begun. The effluent water of the sewage-meadows is carried off by a brook, or rather a ditch cut for the purpose, which, passing through a field to the east of the plot of ground described, in the occupation of a Mr. Pell, has an outlet in the river Nene.

Now all the early cases of fever occurring in the village of Ecton, excepting one possibly contracted in Northampton, and which was sterile as to the infection of other persons, happened among persons who had been working, not in the sewage-meadows, but in Mr. Pell's field. The disease, under favouring local conditions of unwholesomeness, spread to some extent in the village in a way which proved that the later cases were derived from the earlier cases. It is with the earlier cases that the interest of Dr. Buchanan's report alone rests. Out of nine or ten persons employed in haymaking from July 1st onwards in Mr. Pell's field, one being Mr. Pell himself, five sickened with fever or protracted diarrhœa. "Among these five, and among them only, out of all the people living in the village, there occur cases of enteric fever. Other people, living under home conditions apparently identical, escape." The dates at which these different people sickened were respectively July 7th, 9th, 10th, 13th, and 23rd.

While this succession of seizures was going on among persons employed in Mr. Pell's field, the labourers engaged upon the sewage-meadows remained healthy with one exception, a young man who, about the middle of July, was attacked with diarrhœa, and had to cease work on that account for a week.

To this point the inquiry appeared to prove that the irrigated land had no concern in determining the outbreak of fever. But the further considerations suggested themselves to Dr. Buchanan, whether the water in the outflow channel of the irrigated meadows, running through Mr. Pell's field, might not have been used by the workmen there, ignorant of its source, to slake thirst; and whether this water, about the time of the outbreak, might not have been raw or imperfectly depurated sewage. It was known that Northampton sewage habitually contained the excrement of enteric fever patients. At first it seemed as if the facts were adverse to the suggested mode of fever-causation through the effluent water. No sewage had been passed over the sewage-meadows until the 1st of July, the day when haymaking commenced in Mr. Pell's field; and notwithstanding that from rain and flood the irrigated land was in a state in which absorption of the sewage could not go on freely, it is questioned whether any raw sewage could have found its way into the outflow channel—the so-called brook—in time to have caused the sickness among Mr. Pell's workmen. It is admitted, however, that raw sewage may have passed into the brook on the 6th of July, when a recurrence of heavy rain probably washed a part of the sewage off the irrigated land.

But further inquiry brought to light that, on the 20th June, the river Nene, which then received the entire sewage of Northampton midway between the town and the sewage-meadows, overflowed its banks; and that on the subsidence of this flood the outflow channel of the meadows, the "brook," acted as a drain for the lower grounds, and that it was still so acting and carrying off the mixed flood-water and sewage on the 1st July. It has been ascertained that while the brook was thus filled with water mixed with sewage, several of the people working in Mr. Pell's field, including Mr. Pell, drank of it; and the rector of Ecton states, from personal independent inquiry, that "almost all working in the field that week were more or less sick."

The different facts and inferences of the inquiry are thus summed up by Dr. Buchanan:—"The facts of the Ecton occurrences, therefore, are now pretty clear. In the early days of July last, ten people are working on a meadow through which runs a brook containing Northampton sewage, of which a part is formed by the excrement of patients with enteric fever. Some at least of the ten people employed in this meadow drink of the brook, in ignorance of the nature of its contents. Almost all the workers become sick. Two of them, who cannot be followed up, get 'diarrhœa,' a third gets a protracted diarrhœa which bears resemblance to that of enteric fever; a fourth and fifth get distinct enteric fever, one of them ten days after the other. Of the two latter, first one, and then the other, goes home and infects the common privy, and, doubtless, the well of the yard in which their house stands. Other people living in that yard, themselves having nothing to do with Northampton sewage, begin to sicken with enteric fever two or three weeks after this introduction of the disease among them, and fall ill one after the other of the same fever, until fourteen out of the eighteen residents there have been attacked. Meanwhile, among the other 600 odd residents in the village, there is no case

of fever except a solitary and presumably imported one. On the other hand, out of 120 people at work upon the sewage farm itself, there is no single case that can be affirmed to be fever, and the only case of illness that can be heard of is a case of diarrhœa." Dr. Buchanan adds: "In this history, there is seen to be reason for serious regret that the danger of the brook being drunk from in July was not recognised, and that measures were not taken for warning people not to use it for this purpose. Even now, this ought to be done. But, in this history, there is nothing to tell of mischief done by the sewage farm itself, even to persons who were themselves employed on the farm under exceptionally favourable conditions for breathing exhalations from the sewage."

Dr. Buchanan's report, while furnishing important additional information confirmatory of the view that sewage-meadows were not unwholesome, suggests also a considerable danger which may arise when they are so situated that their outflow channels, which at times may contain raw sewage, can be mistaken for fresh water-brooks. It ought not to be difficult to take precautions for the prevention of cases of sewage-poisoning such as those which have occurred at Ecton.

BRITISH MEDICAL BENEVOLENT FUND.

THE Annual General Meeting of this charity was held on Tuesday last, at 11, New Burlington-street, Dr. Burrows, president, in the chair. The report showed that the past year had been a very successful one, the receipts, notwithstanding the absence of any legacy during the year, being above the average; while a sum amounting to nearly £1900 had been distributed among thirty-four annuitants and 124 other applicants. The donation by Her Majesty the Queen of £100, and the substantial assistance rendered by several of the City companies and other friends of the charity, were duly set forth. The names of Sir W. W. Gull, Sir Richard Wallace, and Dr. Warburton Begbie, were added to the list of vice-presidents.

Dr. Felce (to whom a cordial vote of thanks was passed) was elected a honorary life-member on his retiring from the office of honorary secretary, a post which he has filled for the past four years, and in which he is succeeded by Mr. N. H. Stevens. Erasmus Wilson, Esq., F.R.S., and Dr. Felce were elected to fill vacancies in the committee.

Votes of thanks were accorded to Messrs. Churchill for the use of a room for the meetings, to the editors of the medical journals for their kindness in advocating the claims of the fund, and to Dr. Burrows for presiding at the meeting.

Foreign Gleanings.

FOUR CASES OF CONSTITUTIONAL SYPHILIS CURED BY HYPODERMIC INJECTIONS OF CALOMEL.

THESE cases are published by Dr. Ulisse Bonadei, in the last number (December, 1872) of the *Giornale Italiano delle Malattie Veneree e delle pelle*. They were all four treated in the surgical wards of the Maggiore Hospital of Cremona, and presented unmistakable and more or less grave symptoms of constitutional syphilis. The results obtained by means of the hypodermic use of calomel were very brilliant and rapid, and it is stated that sixteen months after the cure no recurrence of the syphilitic manifestations had supervened.

In the same number of the journal three similar cases as above are recorded by Dr. Sante Pico. They were observed in the Civil Dispensary at Mantua, and were as successful as the preceding four.

TWO CASES OF IMPETIGINOUS ECZEMA CURED BY HYPODERMIC INJECTIONS OF STRONG LEVICO WATER.

Recorded by Dr. Pietro Beccaria, of Pontecurone. Case No. 1 was a woman of forty, who had been suffering for about two months from impetiginous eczema of the scalp, as also of the abdomen and upper part of thighs. Poultices and white precipitate had been employed to no purpose. An injection of fifteen grains of strong levico water was then made (October 29th) in the right arm, followed by a similar dose two days after into the left arm. Marked improvement was then observed. Three days after (November 3) an injection of half a drachm was made into the left arm; the same dose was injected on November 6. The only thing then left of the disease was a few scales, which fell off easily. The woman was quite healed. Case No. 2 is much like the preceding one in respect to doses, mode of administration, and results; the only difference was that the seat of the disease was on the back of the hands.

CASE OF VIRULENT PHAGEDENIC BUBO CURED BY POLLINI'S SPECIFIC.

This case, observed by Dr. Juan Giné in the wards of the Surgical Clinique of the Faculty of Barcelona, and recorded in the December number of the *Independencia Medica* of that city, was one in which a phagedenic bubo seated in the groin had brought on considerable destruction of tissue. There was a large rectangular ulcer stretching obliquely in the direction of Poupart's ligament, and measuring ten centimetres in length and about six in breadth. In the fundus of the diseased surface, which was covered with earth-like pultaceous matter, were to be seen several isolated lymphatic glands, moving with each pulsation of the femoral artery, seated immediately below, whilst the fibres of the upper portion of the sartorius were discovered quite free and nicely dissected. All the usual remedies had been vainly employed, when Dr. Giné decided on making a trial of Pollini's specific. It had the obvious effect in this instance of destroying the phagedenic character of the ulcer. The sore ceased to extend, healthy cicatricial granulations formed, the edges of the wound became adherent, and healthy suppuration ensued. At the same time all the general symptoms, which had been very severe and troublesome, amended. The use, internally and externally, of Pollini's specific, was then stopped, and the ulcer treated like an ordinary healthy one.

A CASE OF HÆMATO-FIBRINOUS PYELO-NEPHRITIS.

In the last number of the *Archives de Physiologie Normale et Pathologique* (January, 1873), is a very interesting paper by Dr. Auguste Ollivier, with the above title. The case which, according to the author, offers a type of an affection which has not been described until now, and which is characterised by a special lesion, may be briefly described as follows:—Chronic hæmaturia in an old man of seventy-two; bronchial catarrh; pneumonia; death. *Post-mortem:* Independently of the pulmonary lesions diagnosed during life, the right kidney transformed into a deformed tumour; dilatation of the pelvis and calyces by fibrinous masses; interstitial consecutive nephritis; generalised atheroma of the arterial system; and aneurisms of the corresponding renal artery and of its principal divisions. To this *ensemble* of lesions, Dr. Ollivier suggests that the name of hæmato-fibrinous pyelo-nephritis be given, the case being one of calculous nephro-pyelitis, in which the calculus is represented by fibrinous clots, proceeding from successive hæmorrhages, the source of which was the numerous aneurisms of the renal artery and its divisions. He lays great stress on the combination of the three conditions which led to special lesions: accumulation of clots in the pelvis and calyces; consecutive atrophy of the renal parenchyma through exaggerated distension of these reservoirs; and generalised atheroma of the arterial system.

MOVEMENTS OF THE STOMACH IN FROGS.

Goltz gives the following as the results of his investigations upon the movements of the intestinal canal in frogs:—1. After destruction of the brain and spinal cord the pharynx and œsophagus contract persistently, and the walls of the stomach exhibit active movements. 2. Section of both vagi also induces persistent cramp of the pharynx and œsophagus, and continuous movements of the stomach. 3. Contraction of the œsophagus and movements of the stomach may be induced reflectorially through the medulla oblongata by intense irritation of the skin or of the abdominal viscera.

SMOOTH MUSCLES OF THE KIDNEYS.

One of the last numbers of the *Centralblatt f. Med. Wissensch.* (p. 225) contains a paper by C. J. Eberth, in which the author states that he has discovered in man the existence of a network of smooth muscular fibres on the surface of the kidneys.

THE LANCET.

LONDON: SATURDAY, JANUARY 18, 1873.

THE happy phrase of the Laureate, when he speaks of the "fierce light that beats upon the throne," is at least equally applicable to those who have the often unenviable honour of undertaking professional responsibilities in connexion with Royalty. In the blaze of this light, the document put forth by the medical attendants of the late Emperor NAPOLEON, especially when taken in conjunction with the rider attached to it by Sir WILLIAM GULL, is in many respects an unfortunate one. When carefully examined, it contains only a statement that the *degree* of kidney disease was not suspected, and that this *degree* could not have been ascertained. But to all non-professional readers, and even to some readers in the profession, it has appeared to set forth that the *existence* of kidney disease was not suspected and could not have been ascertained; and this statement would of course be widely at variance with the truth. The presence of blood and pus yielded by inflammation of the bladder would serve, of course, to disguise similar products coming from the kidneys, and would also cast doubt upon the source of albuminuria. But, as Dr. HASSALL justly observes in a letter which we print elsewhere, it would leave the specific gravity of the urine, the proportion of urea and other matters contained in it, and the results of microscopic examination, as sources from which the physician would obtain valuable evidence, and which could scarcely leave a doubt upon his mind. Moreover, the very presence of a calculus would alone excite more than a suspicion of kidney disease, and would render it incumbent upon any practitioner in attendance to seek to discover how far the suspicion was well founded. It is inconceivable that Sir WILLIAM GULL, whose province it was to advise with the surgeons concerning the medical aspects of the case, could have had any doubt whatever of the presence of kidney disease; and the only question to be determined was whether that disease was so extensive as to preclude the performance of an operation that the sufferings of the Emperor so urgently required. Sir WILLIAM GULL will, doubtless, feel it necessary to make known the methods and results of his analyses of the urine previously to the operation, and to state the grounds of his concurrence in the propriety of the measures that were employed. We assume that with regard to the extent of the disease there were no certain data; and that the conclusion formed was necessarily a conjectural one, based upon the apparent constitutional power of the patient and upon the absence of definite symptoms of uræmic poisoning. It is easy to be wise after the event; and we now know that the Emperor's sufferings could in no case have been very prolonged; that it would probably have been best to have employed palliative measures only; and that, if the urgency of the case imperatively required an operation, lithotomy might possibly have afforded a slightly better prospect of temporary recovery. To a patient with weak heart and poisoned blood few things are more dangerously depressing than the endurance of severe physical pain and the expectation of a succession of aggravations of it by surgical operation; and a proceeding that could have been begun and finished in a few minutes, that would have relieved all pain, and that would have removed all apprehension of its recurrence, would, so far as these advantages go, have been distinctly preferable to that which was actually done. This, as we have said, is only wisdom after the event. Lithotrity, of course, has its countervailing advantages; and we feel sure that Sir HENRY THOMPSON was governed in his decision by good and sufficient reasons, founded upon such knowledge as it was at the time open to him to obtain. The profession will await the publication of these reasons with anxiety, and will judge of them in a candid and friendly spirit.

We cannot but perceive, however, that it would have been far better if the report of the post-mortem examination had been limited to the simplest possible statement of pathological facts, and if all inferences founded upon those facts had been left to a subsequent occasion. Discussions and differences of opinion would then have been confined to competent critics, and the public would neither have been startled by the passage that has been so sadly misinterpreted, nor by the spectacle of the separate report in which Sir WM. GULL has recorded his personal belief about a question that must for ever remain insoluble. Sir WILLIAM would have better consulted his own dignity, and the interests of his profession, if he had remained at Camden-place for the discussion that followed the post-mortem, so that he might have obtained the consent of his colleagues to the slight verbal changes that would have covered his views as well as theirs, and that would have rendered his protest unnecessary. His separate report can be considered in no other light than as an instance of the errors of taste that sometimes diminish the lustre of the most brilliant career, and will for a long time serve to remind all great physicians that they can claim no exemption from the frailties of humanity.

IN our impression of the 21st ult. we told briefly the story of the doings of the general inspectors of the Local Government Board in the initiation of the Public Health Act, so far as they had become known at that time. The story was a remarkable one. The inspectors differed from each other in their views as to carrying out of some of the most important provisions of the Act; one inspector differed from himself in expressing opinions about the same thing in different places; another inspector did not hesitate to criticise unfavourably in public the opinions of a colleague; and all on some points differed from the publicly expressed views of their President. Such a picture of circumlocutionalism in a craze has not often been presented to an admiring public in recent years. These are the gentlemen, it must be remembered, of whom Mr. STANSFELD lately said, in relation to sanitary authorities—"It seemed to me more than ever necessary that I should be able to rely upon my negotiators, and that local boards should be able to feel that there was some one person with whom they should have oral communication, and who should represent the policy of the Local

Government Board." Such also are some of the results of this "policy."

We have now before us another illustration of the doings of the general inspectors. This illustration is the most remarkable of all: first, as for the first time it presents us with a complete view of inspectorial, and presumably of the Board's, notions of what the sanitary organisation of a district should be; and, next, because one of the new assistant-inspectors comes upon the scene as advising equally with an inspector upon the carrying out of sanitary organisation.

On the 13th ult. Mr. FARNALL, accompanied by Mr. MOULE, one of the assistant-inspectors of the Local Government Board, met the chairman and vice-chairman of the urban and rural sanitary authorities for Essex, at the Shire Hall, Chelmsford, to confer with them upon the provisions of the Public Health Act, relating principally to the appointment of officers. Mr. FARNALL'S suggestions, briefly summed up, were as follows:—The county to be divided into six districts; a chief medical officer of health for each district; the district medical officers to act as assistant medical officers of health; one inspector of nuisances for each union; the relieving officers to act as assistant-inspectors.

This scheme is noteworthy as showing the process of growth going on in the Local Government Board's and its inspectors' conceptions of the sanitary requirements of districts in respect to supervision and inspection; but it also shows the remarkable vacillation in the opinions of the Board and of its inspectors. The Local Government Board in this latter respect has become the veritable weathercock of Government boards. Not a month ago, Mr. HENLEY, Mr. HAWLEY, and Mr. CORBETT were strongly dissuading, under their instructions from the Board, the appointment of district medical officers for health functions; Mr. FARNALL now, under his instructions, sees a necessity for their appointment. Not a month ago, the inspectors first named were uncompromising in their requirement that a chief medical officer should be debarred from private practice; now Mr. FARNALL is authorised to say, "If you cannot find a good man who would give up his private practice for the salary you would be able to give, why then it would be absolutely necessary to appoint some gentleman who would retain his private practice." Not a month ago, other inspectors, without exception, so far as is known, were stating what was held to be equivalent to an authoritative decision of the Local Government Board, that the Board would not permit relieving officers to be appointed inspectors of nuisances; now Mr. FARNALL is authorised to state that the Board "would not object" to relieving officers being appointed assistant inspectors of nuisances where such appointments were necessary; and he complimented relieving officers acting as inspectors of nuisances on the mode in which hitherto they had performed that duty!

It might be supposed that contradictions could not well be pushed further. Worse, however, is to come. When Mr. FARNALL had set forth his views, Mr. MOULE then proceeded to set forth his views. Mr. MOULE is reported to have "endorsed" Mr. FARNALL'S suggestions; but then he went on to say that "there were three ways of appointing medical officers. The first was to increase the salaries of the present district officers for doing sanitary duties. This plan *he could not advise; for it had been adopted in South Wales, and the outcome of it had been that inspectors of nuisances had to be appointed, at salaries of from £150 to £200 a year!*" Could official indecency be pushed further? Here one of the fledglings of the general inspectorial staff, unchecked by his senior, is permitted to criticise publicly and unfavourably the advice of one of the oldest members of the staff in another district—advice which, it is understood in the district in question, has been approved by the Local Government Board. Further, at a later period of the meeting, notwithstanding Mr. FARNALL'S expressed opinion, on one of the representatives of the rural sanitary authorities observing—"it seems to me as though there is too much machinery to be put in motion for not so very serious a grievance,"—Mr. MOULE, assenting as it were to the justice of the last observation, interposed the remark: "I think you might drop the district medical officers." Mr. MOULE, in fact, has no hesitation in expressing a positive opinion upon a subject respecting which the President of the Local Government Board has been content to think thoughtful and cautious action will be necessary. He has no hesitation, moreover, in dissenting from the expressed opinion of the Royal Sanitary Commission on the subject, and of all the men who, having large experience of it, gave evidence before that Commission.

This is bad enough. But what are we to think of this appearance of one of the assistant-inspectors of the Local Government Board as an adviser of Sanitary Authorities on sanitary questions? Mr. STANSFELD, when he recently explained the appointment of these inspectors, said: "I have not appointed a sanitary inspector at all; but I have simply appointed assistant-inspectors, so that the inspectors themselves may be left free to negotiate the initiation of the new Act." For this purpose "he had relieved the latter from the routine of workhouse inspection by giving them assistant-inspectors." We shall not attempt to suggest an explanation of this crowning contradiction. We commend it to the thoughtful attention of our readers. For ourselves, we frankly confess to a fear that the reasonable working of the Public Health Act of 1872 has been utterly wrecked by the course taken for its initiation by the Local Government Board. This question will, no doubt, enlist attention during the near approaching session of Parliament. Meanwhile, there is some professional consolation in the reflection, which we believe to be fully authorised by Mr. STANSFELD'S late statement, that the Medical Department of the Local Government Board and its distinguished head are happily free from all suspicion of having contributed to this lamentable result. An attempt is being made to initiate a great sanitary reform by persons having at the best only a dilettante knowledge of sanitary work and requirements; and even from the outset, as might have been foreseen, the results appear to be fatal to the success of the most important sanitary work done by the Legislature since 1866.

MR. FRANCIS GALTON supplements his able treatise on the transmission of hereditary qualities by an article in the new number of *Fraser's Magazine* on Hereditary Improve-

ment. His argument is to this effect: Starting from the law of nature that like produces like, would it not be possible so to observe that law as to secure a class in the community whose original qualities of healthy physique, vigorous intellectual powers, and masculine will, might be conserved, intensified, and improved? In a rough and irregular way something of the kind has been done by our aristocracies. Would it not be possible so to use the available material still left to us as, by well-assorted marriages, by mating the wise with the wise, the healthy with the healthy, and so on, to secure and keep up a class capable of government and legislation? Mr. GALTON is no special pleader for "our old nobility." He simply wants the resources of the British people in physique and mental power to be concentrated and kept together in a class or order which shall be entitled by its superior attributes of mind and body to take in hand the affairs of the less fortunately endowed million. Put thus nakedly, Mr. GALTON's idea may provoke a smile; but it contains a considerable germ of truth, and at any rate is susceptible of application in other directions than its author has chosen to indicate.

Take, for instance, the reverse of Mr. GALTON's ideal picture—the criminal classes. Might not the method of "hereditary improvement," as suggested by him, be effectively applied to the diminution of crime? If among any body of the community hereditary transmission of physical and moral attributes is conspicuous, it is among the population which fills our gaols. Look at its general physique. Imperfect cranial development, with its concomitant of feeble cerebration, amounting almost to a retrogression in the direction of the brutes, is apparent in the mass of its members. Intellectually and morally they are imbeciles, intelligence being replaced by cunning and the will reduced to its elementary form of desire. In the struggle for existence, they herd together, deriving constant accessions from the degenerate of the classes immediately above them, and perpetuating themselves amid conditions most favourable to the reproduction of their like. This is not theory. At a late meeting of the Medico-Psychological Association evidence was adduced to show that the "criminal classes constitute a persistent factor in the community, inheriting and transmitting peculiarities, physical and moral, which induce to crime with the force of gravitation." Forty years' experience of the county prison at Perth enabled Dr. BRUCE THOMSON to confirm this observation, and to suggest means for removing, or at least for modifying, the evil to which it points.

Those means are almost identical with the method proposed by Mr. GALTON. First break up the class. Remove its constituent members to as great a distance from each other as possible. Place them under conditions most favourable to the counteraction of their inherited tastes, propensities, and habits. Such is the general principle at the root of reform of criminals. Its *modus operandi* for individuals must be left to the prison congresses to devise, improve, and perfect. Much was suggested with this object at the meeting held last year under the presidency of Lord CARNARVON, when American and European disciplinarians compared notes and exchanged ideas as to the best means of reclaiming the convict and counteracting the effects of his influence and example. As at present treated, the moral disease of crime is fostered by conditions under which its cure is attempted. The evils of "hospitalism" have more than their counterpart in those of "carcerism." The moral atmosphere in which the criminal patient lives and moves is even less conducive to recovery than the material atmosphere in which the physical patient has his being. On this point American, Russian, Italian, German, French, and Swiss disciplinarians were at one with the English at the late Congress. They were widely at variance, however, as to what system should be substituted for the present.

Principiis obsta. This, the safest rule in medical treatment, is the wisest one in moral. Progressive sifting and classification may do much to counteract the evil influence of criminal upon criminal; but prevention ought at the same time to be pursued. Education, as Sir JAMES COXE is never tired of pointing out whether in lunacy reports or in occasional addresses and papers, is the one method of grappling successfully with every form of mental or physical defect. What is the use of facilitating the criminal's return to society as an honest bread-winner if he bears about with him a proclivity to crime which asserts itself at the next opportunity? But the education which can destroy this proclivity in the bud must have begun early, and must take cognisance of far other facts and proceed by far other methods than those traditionally adopted in our schools. Instruction in his physical and moral constitution, for which the brothers COMBE so earnestly pleaded, must be given to the child even at the sacrifice of not a little which use and wont consider essential, so that he may grow up as the intelligent guardian of his own well-being and interests as an individual and a member of society. A leaf might also be taken from our German kinsmen, and periodical inspection of our schools by medical men come to counteract the forming of pernicious habits or to strengthen weak points among the *alumni*. In this way education would be at once a physiological and psychological undertaking, fitting the youth for such employment as his powers suggest, and finding for every one his congenial place in society.

IT must be a great relief to persons of limited conversational powers to find that the one topic upon which they always feel pretty safe has by the force of circumstances become one of universal interest. In society, in the newspapers, there is ample evidence of the extent to which the weather is uppermost in people's thoughts; and it is not a little curious to notice how consolation for a too probable deficiency in the next season's crops is sought to be extracted from the present mortality returns. The comparatively low death-rate which has prevailed in the metropolis for the last three months is an undoubted fact, as it is also that the rainfall during the same period has considerably exceeded the average. From these coincident circumstances it appears to have been inferred that wet seasons are, on the whole, healthy seasons in this country. It will possibly interest our readers if we place before them some data gleaned from professedly authentic sources, which will help them to arrive at a more satisfactory conclusion as to the influence of rainfall upon health than, so far as we are aware, have hitherto been supplied in any of the numerous lay sermons called

forth by the down-pour to which we have all by this time got tolerably accustomed.*

Into the vexed questions, whether public prayers for fine weather are justifiable under any circumstances, and, if so, whether the rainfall over the whole of the country has reached the point at which it is necessary to take such steps to bring about its discontinuance, we shall hardly be expected to enter. As a matter of observation, we know that periods of wet and of drought have alternated hitherto, but we have nowhere seen it satisfactorily demonstrated that the rainfall of 1872 in England has more than compensated for the defective moisture of the two preceding years. At Greenwich, whence we get statements not open to doubt as regards their trustworthiness, there was in 1870 a defect of 5½ in. and in 1871 of nearly 2 in. in the rainfall; last year there was an excess of 6 in., so the balance is still on the side of deficiency. What with the continually increasing extent of drainage-works both in town and country, it strikes us that an increased rainfall is rather a thing to be desired than dreaded, if we would preserve the fertility of our soil and have the means of adequately supplying water to our rapidly increasing town populations.

The Registrar-General's returns show that during the thirty-two years 1840–71 the metropolitan death-rate has averaged 24·3 per 1000 annually, and that the average annual rainfall at Greenwich for the same period was 24 in. Last year the rainfall was 30 in. and the death-rate 21 per 1000. Now, whatever the relation between rainfall and health may be, the mortality returns demonstrate that it is by no means absolute and invariable, but is rather one of many factors which may on rare occasions be concurrent in the production of a result, but are ordinarily more or less diverse and counterbalancing in their effects. The comparison of single years brings this point out strongly. Thus in 1850 the rainfall was defective by nearly 5 in., and the death-rate was 3 per 1000 below the average; while in 1866 an excessive mortality coexisted with a rainfall as great as that of last year. To take only one out of many possible reasons for the divergent results just noted, it may be observed that, in the first case, the cholera epidemic of 1848–49 had probably cleared away many weakly persons who might otherwise have lingered till the next year; while in 1866 influences ordinarily favourable to health were either masked or subverted by the cholera epidemic which then prevailed. The complexity of the laws of mortality is so great, and the labour involved in differentiating them and assigning to each element its just value is so formidable, that there is little hope of any private individual essaying it; and we can only trust that our official statists may find time some day or other to turn their attention to this subject.

Looked at broadly and without regard to any modifying conditions, some general relation between rainfall and mortality may be assumed from the fact that, if we pick out six dry years when the rainfall averaged only 18 in., the average death-rate is found to be 26; while six wet years, having an average fall of 32 in., yield an average mortality of 24. We suspect, however, that a close investigation of the death-returns for the several years embraced in the two groups would show that influences far more powerful than rainfall determined the death-rates. Take the item of temperature alone: the mean temperature of two years may be almost identical; but the duration and degree of hot or cold periods in each year may differ so greatly as to account for a large difference in the mortality from diseases which are influenced by heat or cold. Again, in judging of the health-conditions of any given year, regard must be had to precedent circumstances; epidemic periods especially must be taken into account.

The facts obtainable from the Metropolitan returns are borne out by those relating to other large towns. Liverpool, for example, had a greater rainfall and a lower death-rate last year than in either of the four years preceding; but the average rainfall in Liverpool is considerably greater than that in London, whereas the latter has a much smaller average death-rate. If rainfall be a condition favourable to health, it is evident that, as between Liverpool and London, more powerful agencies than rainfall are at work to account for the difference in the death-rate.

It occurs to us that the most important aspect of this subject of weather and health has been altogether lost sight of in those lay sermons that we have alluded to. Is it anything more than an assumption that the past year has been so very healthy? The death-rate was low, unquestionably; but we must not forget that, in London at any rate, we had previously been visited with two remarkably severe epidemics of scarlet fever and small-pox. Dr. WHITMORE, in his report on the health of Marylebone during November, speaks of "an unusual amount" of sickness from diseases of the lungs and breathing organs, owing to the excessive humidity of the atmosphere. The Rev. F. O. MONNIS has lately stated in *The Times* that on all sides in the country he hears of an uncommon prevalence of illness. We have had similar reports from more than one metropolitan locality. The truth of the matter may be well summed up in the language of Dr. BALLARD, who has deeply studied the subject:—"The indications derivable from the mortality are fallacious, inasmuch as conditions of weather that may bring about a fatal termination of diseases already affecting a population are not necessarily such as to occasion or favour attacks of illness in persons already in average health." It is clear that no safe conclusions about the effect of weather upon health can be arrived at until a proper system of sickness returns, applicable to the whole population, has been established in this country.

THE last few weeks have witnessed a renewed correspondence, in *The Times* and other papers, with regard to the use that should properly be made of hospitals, and to the persons who should properly resort to them. It is not long since we were accustomed to take for granted, as a belief admitting of no dispute, that the maintenance of a hospital was precisely that form of doing good which had the smallest possible tincture of evil, and in which persons of all shades of opinion might most cordially unite. Such reformers as Sir CHARLES TREVELYAN and Mr. JODRELL, however, tell us that this belief is all wrong, and that the out-patient departments, at least, are sources of demoralisation and pauperism to a degree that can hardly be imagined. The

* These data will be found on another page.

provident dispensary panacea, by which the existing out-patient classes are to be made independent, respectable, and generally self-supporting, seems also to have its drawbacks; for we learn from a letter sent to the *Daily News* by Mr. VENMAN, Secretary to the Pimlico Provident Medical Institution, that he complains of "unfair competition" on the part of medical men not connected with his dispensary, who, he says, attend patients at dispensary rates without instituting any sort of examination into their circumstances or position in life. In the midst of all this turmoil the great hospitals go on quietly accomplishing their allotted work, doing on the whole an enormous amount of good, and necessarily doing also a certain amount of mischief. It is the old story of the wheat and the tares, and we suspect it is one of the cases in which they must grow together until the harvest.

In the meanwhile, Sir CHARLES TREVELYAN and Mr. JODRELL remind us very much of a good little boy, who had been brought up in a virtuous and thrifty country family, where he had been mentally nourished on homely proverbs, "Sandford and Merton," and Miss EDGEWORTH's Moral Tales. He went into the service of a great mercantile house, and was set to open an elaborately corded parcel. Half an hour afterwards he was found, by one of the senior clerks, bending in a spirit of intense self-righteousness over the second knot, and intending, by-and-by, to fold all the wrapping paper and carefully to coil up the uninjured string. To his utter bewilderment, his ears were boxed for his pains, and he was told that time was more valuable than string, and that there are many knots which it is better to cut than to untie. The hospital reformers of the Charity Organisation Society might, perhaps, be able to accomplish some good if they would devote themselves to one point alone. They might succeed in limiting the numbers of hospital out-patients to something fairly within the powers of each staff; and then a principle of selection would inevitably assert itself in course of time. A surgeon or physician who found that his cases were no longer too numerous for careful examination and clinical teaching, would soon become particular about the quality of the materials on which his skill was brought to bear. So long as out-patients are numbered by hundreds of thousands, so long will all sorts of so-called abuses flourish; and it is equally useless and silly to expect to prevent them by subjecting a few of the more decently dressed applicants to an offensive cross-examination about their means of subsistence. The statement once made by Dr. MEADOWS, and recently quoted by Sir CHARLES TREVELYAN, to the effect that the wives and daughters of men having a thousand pounds a year had borrowed their servants' clothes in order to attend as hospital patients must, of course, have been true in some single instance; but we can hardly conceive of it otherwise than as an act of exceptional lunacy on the part of the members of one family; and had we not had melancholy experience of how little culture a thousand a year may cover, we should have said that the disguise would be unavailing, and that the servants' clothes would be powerless to conceal the accent and manner of the employer. Notwithstanding such cases, we simply do not believe the out-patient system is, on the whole, an evil, excepting at those hospitals where it is so conducted as to be a sham. These we have never hesitated to denounce, but on the ground that the examination of the patients is too cursory to afford a foundation for either diagnosis or treatment. The medical art suffers by a perfunctory discharge of duty far more than the medical pocket by the extension of advice and medicines to persons from whom some trifle of payment might possibly be obtained.

We print in another column a brief report of a funny indignation meeting of about thirty persons held last week at the London Tavern. The most ardent of the speakers charged hospital physicians and surgeons with making a hypocritical pretence of holding their offices for the sake of charity. Do they, in fact, make any such pretence? We never heard it. On the contrary, we have been accustomed to consider that physicians and surgeons value hospital office chiefly as an arena for the display of their powers, and as a means of constantly exercising and increasing their skill. The time which it consumes is a heavy tax, and for this there is no doubt that the work brings to all kindly-natured men a certain compensation in the form of a distinct personal satisfaction in doing good and in relieving suffering. More than this, we presume, few would venture to say. But we notice the meeting chiefly to point out that its general character, and the tone of the speeches made, sufficiently prove that the profession generally does not recognise the grievance complained of. Doctors, as a rule, are fond and proud of the hospitals at which they learnt their calling, and would be far more disposed to assist than to injure them. We cannot refrain from mentioning, as a droll incident in the affair, that one of the speakers was at the time a candidate for a hospital office, to which, since then, he has *not* been elected.

IN a curiously interesting and instructive paper read before the Epidemiological Society on the 8th inst. by Dr. BUCHANAN, "On the Concurrence of Epidemics," the author pointed out that before inquirers can usefully discuss the mutual relations of epidemic diseases to each other, either in the community or the individual, account must be taken of certain arithmetical considerations. He finds in the quarterly returns of the Registrar-General the material for estimating the arithmetical probabilities of two or more diseases being epidemic at the same time. If, he says, epidemic small-pox occurs in one-tenth of a given number of districts, and epidemic measles also occurs in one-tenth of the same districts, then measles and small-pox will be likely to occur together in just one-hundredth of the districts. The arithmetical likelihood of concurrence obviously has to be measured, before the significance of the number of actual concurrences can be approached. In illustration of this doctrine, Dr. BUCHANAN exhibited to the Society, in parallel tables, the calculated number, and the observed number, of concurrences of various epidemic diseases in pairs, taking the simultaneous experience of 1490 sub-districts of England. There was seen to be much similarity between the figures of the two columns, the inference from such similarity being that the same causes that had led to given frequency of occurrence had led also, without the operation of any new element, to given frequency of concurrence. But there are some interesting instances where the observed frequency

of concurrence differed from the expected frequency; measles and diarrhœa both showing, as far as the limited number of data went, a tendency to prevail at the same time that other epidemics were prevalent. Scarlet fever had been epidemic at the same time as enteric fever in 44 districts; while at the rate calculated from the separate prevalence of the two diseases they would have been expected to concur in 28 districts only. Scarlatina and diphtheria, on the other hand, come together with just their expected rate of frequency. There are here some rather unexpected results; and we shall look with interest to the indications that may come from more extended examination, guarded from its inception with strict arithmetical care, of the Registrar-General's quarterly returns. It may well be that, in publishing these returns for immediate administrative use, the Registrar-General has incidentally afforded us various new means of advancing our knowledge of epidemics; and Dr. BUCHANAN seems to have indicated one such use of the returns.

Medical Annotations.

"Ne quid nimis."

THE EMPEROR NAPOLEON'S FRENCH MEDICAL ADVISERS.

THE French medical journal, *L'Union Médicale*, after stating (what we were not aware of) that injurious comments have been made upon the science and talent of the late Emperor's French medical advisers, in consequence of the English medical press having stated that the English surgeons were the first to discover a vesical calculus which had existed for many years, proceeds to make the following authoritative statement:—

On the 1st of July, 1870, the Emperor being in great pain, a consultation was held at the Tuileries, at which MM. Nélaton, Ricord, Fauvel, G. Sée, and Corvisart were present. A report of this consultation was drawn up by M. Sée, of which we will reproduce the last portion only, as bearing upon the urinary organs:—

"*Condition of the Urinary Organs.*—During the last five years there have been four attacks of hæmaturia; after that which occurred in 1867 the urine continued muco-purulent during one year, but subsequently cleared, and since the month of August, 1869, when there was serious and acute mischief in the urinary organs, the urine has constantly contained a certain quantity of pus, estimated at the lowest as amounting to one-fortieth part, but increasing during the acute attack to one-fourth or one-third of the entire quantity of urine.

"Frequently, also, there has been dysuria, with marked slowness of micturition in the morning; at other times there have been stoppages of the stream, and occasionally there has been so much difficulty as to necessitate recourse to the catheter. This is what happened at Vichy three years ago, and also in August, 1869. It is to be noted, too, that since that time riding on horseback, and the motion of a carriage, often bring on pain in the loins, in the hypogastrium, or in the fundament. Now, an illness characterised by these three phenomena—(1) repeated hæmaturia; (2) urine purulent for nearly three years, with more or less marked alternations; and (3) frequent dysuria, characterised by spasm, or by want of power in the bladder, can only be referred to calculous inflammation of the kidney and bladder (*pyelocystitis calculeuse*).

"If there had been only purulent urine, this might have been put down to a simple catarrh. If it were not necessary to take into account what happened before the month of August, 1869, one might have thought of a peri-vesical abscess opening into the urethra. But the previous attacks of hæmaturia, the persistent purulency of the urine for a whole year, the frequent return of pain in micturition, and the increase of pain by exertion, point to a cystitis of calculous origin, and that this calculus may be situated and developed in the bladder, or have had its primary seat in the kidneys.

"There has been besides, from time to time, an excess of uric acid and of urates in the urine. For these reasons we consider an exploration of the bladder with a catheter *necessary*, and we think *that the moment is opportune*, because there is at present no acute symptom. In fact, if the dysuria, or the pus, or the pain should increase or reappear, one would then fear setting up acute inflammation by the examination.

"Paris, 3rd July, 1870." "PROFESSOR G. SÉE.

L'Union Médicale goes on to explain that this document, though signed only by Dr. Sée, was the common work of all the consultants, that Dr. Conneau was asked to obtain the other signatures, and to show the paper to the Empress, but that this was never done. The document itself was seized among Dr. Conneau's papers by the agents of the Government of the 4th of September, and published in one of the series of papers found at the Tuileries and elsewhere. Dr. Sée himself furnished the *Union* with the preliminary statement, in the presence of M. Ricord, who attested its veracity.

L'Union Médicale continues its statement thus:—

"It follows from these facts and this document that, to the honour of French medical science, the French surgeons on the 1st July, 1870—i.e., two years and a half ago—had as formally as possible, and by the only rational evidence, diagnosed the existence of a vesical calculus in the Emperor's case, and had begged and advised an immediate exploration, and that it was thirty months after this consultation that the prognosis and the diagnosis of our countrymen were verified by the English surgeons."

THE PHYSIOLOGICAL EFFECTS OF CHANGE OF CLIMATE ON THE HUMAN ECONOMY.

SOME discussion has taken place of late as to the influence of a tropical climate on young and immature soldiers, but few attempts have been made to approach this subject from the side of physiological observation. Dr. Alexander Rattray, R.N., in a paper recently read before the Royal Society, has, however, as it seems to us, made some very pertinent observations in extension and verification of those he had previously published in the Proceedings of the Society. The paper consists of a series of tabular results obtained during a passage from England to the Cape of Good Hope and back, supplemented here and there by some commentary or summary statement. The temperature did not reach that of an Indian climate, but it was, near the Equator, 82°F., and from 55° to 65° F. in the South, and from 52° to 56° F. in the North temperate zone. The tables are to set forth the effect of tropical climate on respiration; the climatic spirometric range at different ages; the spirometric measurement of the lungs, and the number of respirations in relation to temperature; and, in connexion with the same inquiry, the effect of climate on bodily development. Dr. Rattray considers that one of his tables shows that tropical heat interferes much with the bodily growth and development, as indicated by the weight, retarding it in most and stopping it in some individuals. Both the number who grew and the amount of increase, as shown by the tables, were least in the tropics; and the author points out that these detrimental fluctuations necessarily affect both body and brain. "If," he adds, "we would produce strong, healthy, long-lived officers and seamen, fit for any work or climate, we should not send them unnecessarily to warm regions while as yet undeveloped lads."

The following are among the chief results and inferences

of Dr. Rattray's experiments. The primary effect of great changes of climate is on the circulation, the blood being drawn surfaceward by heat, and driven inward by cold. The secondary and local effect is an increase or decrease in the vascularity and function of the various tissues and organs of the entire body—the external increasing under heat, the internal under cold, and *vice versâ*. Hence in the tropics the vascularity of the adult lungs is reduced by an average of 12 or 13 fluid ounces; their spirometric measurement by an average of 23 cubic inches; their function by 18·43 per cent.—i.e., the use of 36·85 cubic feet less air daily, excretion of 1·84 oz. less carbon, and 6·57 per cent. less of watery vapour. The nephritic vascularity and secretion are also reduced by 17½ per cent., and those of the skin increased by 24 per cent. In unison with the respiration, the circulation is more languid in the tropics, as indicated by the reduced (several beats) and perhaps less forcible pulse. The temperature of the surface, and probably that of the blood and body generally, on the other hand, rises about 2° F. under tropical heat. The organs and functions of animal, like those of vegetable, life are affected by great changes of climate, heat impairing the weight, strength, and health—i.e., the physique,—at all ages, and retarding growth in youth; while cold has an opposite effect. Collectively, these changes are salutary no doubt, and meant to assimilate the various organs, functions, and body of the inhabitants of one zone to those of the native races, to meet the requirements of the foreign climate, for which they are not, however, and perhaps never can be altogether, physiologically fitted.

THE CARDIFF TRAGEDY.

THE fact that a coroner's jury has returned a verdict of *felo de se*, and has deliberately stated that the deceased, when he killed himself was in a *sound state of mind*, is one which, on account of its extreme rarity, warrants us in making some comments upon it, and stopping to inquire what were the facts which led the jury to this very unusual verdict. The facts of the case were as follows:—On the 31st of December last the deceased, John Jones *alias* Swan (the subject of the coroner's inquiry), was walking with a policeman of the name of Perry in the neighbourhood of Cardiff. Jones and Perry were seen entering a public-house together, when Jones suddenly and without warning turned round upon Perry and stabbed him "in front" with a knife. Jones then inflicted wounds upon himself (one of which seems to have opened the pleural cavity), of which he died a week later. About the main facts of the case there was no doubt, and the only question left for the jury to decide was that of Jones's mental condition when he committed murder and suicide so suddenly.

Firstly, there does not appear to have been any adequate motive for the murder of Perry by Jones. The murder was committed (at least so it appears from the evidence) in broad daylight, and the two men appeared on friendly terms, and were going to drink together.

With regard to the immediate antecedents of Jones the following evidence was given. The woman with whom he lived stated that previous to the occurrence he had been drinking for nine or ten days, but for a couple of months before that he had been a teetotaler. On Christmas eve, a week previous, the deceased (who was a butcher) had been too drunk to take his usual stall in the market, and the general tenor of the evidence went to prove that the deceased had been more or less intoxicated during the whole of the week preceding the murder. The whole of Jones's actions during the night of December 30th were those of a man suffering from delirium tremens. He was possessed by unreasonable terror and apprehension, and was heard frequently to say that everyone was "against him." The butchers and police of the town were combining against him, and the pantomime at the theatre seemed, to his disordered imagination, to have some damaging tendency towards himself. The sound of a man's voice singing in the street was the voice of an enemy; the neighbours' windows contained spies; and the fire-engine was coming to wash them out of their beds. He hardly slept at all on the night of the 30th, and then only after a sleeping-draught. He spent the night in wandering about his premises, muttering nonsense and performing absurd and unreasonable acts. The woman who gave this evidence said "he was perfectly sober at the time." She could not have meant by this that he was in his sober senses; what she probably meant was, that he presented none of the obvious effects of drunkenness, such as staggering, &c.

The nurse at the infirmary said that after his admission Jones was delirious two nights, shrieked "Murder!" and tore his dressings from his wounds.

The medical officer under whose care he was did not consider that there were any grounds for supposing that the man's mind was unsound at the time of the murder or suicide. If the report of the proceedings in the *Cardiff Daily News* be correct, it seems to us that we have as complete a clinical history of delirium from drink as one could possibly wish to have, and we cannot but be surprised that a coroner's jury, which is usually satisfied with the most meagre evidence of "temporary insanity," should have been so hard to convince on the present occasion. It is interesting to speculate what difference it might have made to the minds of the jury if the collateral facts had been different. Supposing he had committed suicide only, should we not probably have had the time-honoured verdict? and supposing he had survived his suicidal attempt, and had been tried for murder, what would have been the chances for and against his receiving capital punishment?

THE CLINICAL SOCIETY.

THE annual meeting of this Society was held on Friday, the 10th inst., under the presidency of Sir William Gull. The business of the evening included the appointment of office-bearers for the ensuing year, and the following gentlemen were unanimously elected:—President: Mr. Prescott Hewett. Vice-Presidents: Drs. Owen Rees, J. Burdon-Sanderson, A. P. Stewart, and Hermann Weber; Messrs. Callender, Campbell de Morgan, Cooper Forster, and Timothy Holmes. Treasurer: Dr. Greenhow. Council: Drs. Andrew, Broadbent, Buzzard, Cholmeley, E. Clapton, Duffin, Wilson Fox, Habershon, Hughlings Jackson, and A. Meadows; Messrs. H. Arnott, Morrant Baker, Barwell, Brudenell Carter, Clover, Langmore, Nunn, Sibley, Spencer Wells, and Willett. Honorary Secretaries: Dr. Reginald Southey, and Mr. George Lawson. Trustees: Drs. Greenhow and Burdon-Sanderson, and Mr. Callender.

Several rules were altered and revised, one only resulting in any special discussion. It was proposed after Rule 16 (which relates to the appointment of president) to add, "The President, at the termination of his year of office, shall not be eligible for re-election in the succeeding year." Mr. Kesteven proposed, and Dr. Meadows seconded, a resolution recommending the addition. The resolution was supported by Mr. Christopher Heath, Dr. Anstie, and Mr. Barwell, and opposed by Dr. Greenhow, Dr. Douglas Powell, and Mr. Brudenell Carter, and was ultimately lost by 26 against 15 votes, many of the members not voting. As the rule now stands, therefore, the office of president is biennial.

Mr. Campbell de Morgan proposed a vote of thanks to the retiring officers (Sir William Gull as President, and Dr. Buzzard as Secretary), and alluded gracefully to the

brilliant, able, and courteous manner in which both gentlemen had performed their respective duties in connexion with the business of the Society. Mr. Barwell seconded the proposition, which was carried unanimously, and was briefly acknowledged by Sir Wm. Gull and Dr. Buzzard.

Mr. Callender explained a simple sanitary system to be employed in the dressing of wounds in hospitals; and Dr. Lockhart Clarke read a most interesting paper on a case of Cysts in the Cerebellum, the discussion of which was postponed to the next meeting of the Society.

It is a great pleasure to record the favourable progress of this, the youngest of the metropolitan medical societies. The exertions of its indefatigable treasurer, Dr. Greenhow, have done much to help success, and to place the Society on a sound financial footing, and all the office-bearers, past and present, well merit the compliment paid by Mr. de Morgan to those who have just retired. There are now 189 resident, and 33 non-resident members.

THE PROPAGATION OF ENTERIC FEVER.

ANOTHER striking illustration has occurred of the fact that a community may go on for years, perhaps for a generation, drinking water contaminated with sewage, and yet almost escape suffering from typhoid till, the specific poison of this horrible disease being *imported*, the disease spreads, and the hitherto unsuspecting inhabitants have demonstrated to them the extent to which they have been swallowing fæcal matter in their drinking-water.

There has lately been an outbreak of typhoid in the village of Nunney, in the Union of Frome, Somersetshire, unlike anything which has been seen by medical men who can answer for the medical history of the village for twenty-eight years. Now and again there may have been isolated cases of typhoid, but nothing like the recent outbreak. Nunney has a population of 832, living in 199 houses. It appears that 76 persons got typhoid between June 15th and October 26th. Of the 76 cases, 57 occurred in 21 houses, in numbers from two to six in a house. The remaining 19 cases were solitary ones.

The interest of the outbreak is first in the origin of it, and, secondly, in the mode of its extension. These have been made out by Dr. Ballard with a care and minuteness for which he has already a reputation in regard to typhoid investigations. To fully appreciate the significance of the circumstances, the report must be read in full; but the principal facts are too plain and too practical to be unrecorded by us. The first case, fortunately a very typical one, came from a distant place named Old Ford, and was seen by Mr. Marsh on the 15th of June. The patient's name was Sidney Nicholas, and he occupied the very last house in the village up the stream, to which we shall presently refer. On the 29th of June his brother sickened. In August two other cases occurred in this same cottage. In the adjoining cottage three members of the family sickened in the week ending July 13th. An interval of a month elapsed without fresh cases; when, in the weeks ending August 10th and 17th, eleven persons, members of five families, all taking their water from nearly the same spot of the brook which passes through Nunney, and which is so placed as to receive much of the human excrement of Nunney and the villages about—viz., Weston-town, Wanstrow, Holwell (with its twenty-five cottages without privies), and Tenterden, at which last part the first cases occurred,—and which brook was the principal source of water for drinking and other domestic purposes to the villagers. Another interval of a fortnight occurred, and the disease spread in other directions. The chief points of Dr. Ballard's investigation are these—first, that the disease was imported; secondly, that there were but three cases in which it was doubtful whether the water from the brook had been drunk, one of these cases being that of a coachman, who said he had nothing to drink in the village but an occasional glass of beer at the "George Inn," both the master and mistress of which had died of the fever; thirdly, that, with two exceptions, one of which is doubtful, no fever occurred in families entirely supplied with water from other sources than the brook; fourthly, that there were at least two instances of persons at some distance taking the fever after visiting Nunney, who had drunk nothing at Nunney but tea, or tea and cider; lastly, as we have already said, that a community may go on drinking water containing excrement for twenty-eight years without being attacked with typhoid, showing that mere fæcal matter will not give the disease unless it be charged with the typhoid poison. This has long been a moot point, but there is a steadily increasing weight of testimony in favour of the view long so ably enforced by Dr. William Budd, that the typhoid poison is something specific, and not existent in ordinary sewage.

The moral of such cases as Nunney is clear, that a town or a village which allows its water-supply to be contaminated with sewage has all the conditions necessary for an explosion of typhoid, and only needs the arrival of a case and a few favourable circumstances to have an extensive and disastrous epidemic.

THE LAST FOLLY OF THE LOCAL GOVERNMENT BOARD.

AN almost incredible piece of perverse folly is about to be committed by the Local Government Board, unless the much-enduring ratepayers pluck up courage to resist it. It will be in the recollection of our readers that a large hospital was built at Highgate (under the direction of the Central Asylum Board) for the reception of acute cases of sickness from the district, including Westminster, St. Giles's and St. George's, Strand, and St. Pancras Unions. The Local Government Board now assert that this large building does not provide enough beds for its purpose; they say that 720 beds are required, and that therefore there is a large excess of cases unprovided for. We believe the above number to be entirely incorrect; for since the partial introduction of the dispensary system, the district medical officers are enabled to treat, and do treat, a large number of the acutely sick, whom they would formerly have sent into the infirmaries, in their own homes. But granting for a moment that there may be the need for hospital accommodation which the Local Government Board assumes, we should like the reader to guess where the Board propose to find it. Why, of all places in the world, they have absolutely chosen the old Strand Workhouse in Cleveland-street! The thing is monstrous. Of all the workhouses which our Commissioners visited in 1865 there was scarcely one which, from site and construction, was more utterly unfitted for a hospital for acutely sick persons. In order to be made even decently proper for this purpose, the building would have to be entirely reconstructed, at an enormous cost to the ratepayers, and of course a fresh staff of officials must be provided, and further large expenditure thus incurred. Even a worm will turn if you tread on its tail too viciously, and it is said that the guardians of the Westminster Union are about to protest in very forcible terms against the criminal absurdity. These guardians say that they were compelled to rebuild the (old St. James's) workhouse at a cost of more than £30,000, only four years ago, and that it contains a suite of most excellent wards in which it would be perfectly easy to treat all the acutely sick of the "Westminster" district without troubling Highgate at all, and they resent, as a peculiar injustice, the taking of their

sick from their present position of comfort, and putting them (at much increased cost to the ratepayers) into such an abominable hole as the Strand Workhouse. We sincerely sympathise with the Westminster guardians, and we hope the St. James's Vestry, and the ratepayers at large, will support them by a prompt and decided expression of opinion.

CHEMISTRY AT THE ROYAL COLLEGE OF SURGEONS.

THE recent notice of this subject in connexion with the Preliminary Examination in June last, in these columns, evoked, we understand, grave remonstrances addressed to the authorities of the College with the following singular result—that at the December examination not a single candidate was rejected in chemistry! The questions are not particularly easy, and again betray a questionable knowledge of his subject on the part of the unknown examiner—e.g., when he asks for the chief compounds of hydrogen and phosphorus, phosphuretted hydrogen being the only recognised one! But he is evidently of pliable material, and the College authorities probably put the screw on him in order to avoid an inconvenient motion by Mr. Henry Lee, which stood for discussion at the quarterly meeting of the Council on the 9th instant, viz.:—"That the Court of Examiners be requested to call, through the Dean of the College of Preceptors, the attention of the Examiner in Chemistry to the number of rejections that occurred in the Preliminary General Examination in June last." It is absurd to suppose that students are very much better prepared at one period of the year than another, and though the questions were not so difficult in December as in June, yet it is impossible that both sets of papers can have been fairly dealt with, when 45 per cent. of the candidates were rejected at one examination and none at the other.

THE FLOODS AND THE PUBLIC HEALTH.

So much speculation has recently occurred on the influence of floods upon the public health that we have been at the pains of making special inquiries as to the point in and about the Thames valley, and particularly in the neighbourhood of Windsor, Egham, and Staines, all of which districts are considerably inconvenienced, notwithstanding all that has been recently done in the way of locks and weirs by the Thames Conservators, under the engineering superintendence of Mr. S. W. Leach. It appears, however, that inconvenience is really the proper term to use in this case, for we are assured by the medical authorities of the town and neighbourhood that the public health is very satisfactory. Ague is a very rare disorder in the Thames valley, and some of the local practitioners have never seen a case in these districts, although the latter are, as we know, flooded to a greater or less extent every winter. The house-surgeon of the Windsor Hospital reports that, of 3330 patients treated in 1871, only one case of ague is recorded, and one only during the past year out of a total of 3370 patients. Enteric fever prevails to some extent in the out-lying districts, this disease being, of course, regulated somewhat by the floods, inasmuch as cesspools are not yet abolished from this locality. Mr. Menzies, deputy-surveyor of Windsor Great Park, records an opinion that the Thames Conservancy works have benefited the Crown lands both in winter and summer, and that, following the advice of Mr. Simon and Dr. Buchanan, it is now practicable to keep the subsoil water at an average depth of about five feet from the surface. It is anticipated, however, that within the next two or three years, maps, giving clearly and concisely the geological strata throughout the United Kingdom, will be provided for the medical officer of health in each district. Then, and not till then, shall we be able to ascertain with any precision the amount of influence that floods, or other purely terrestrial circumstances of weather, have upon the causation or perpetuation of disease.

THE PRIESTLEY MEMORIAL.

THE twin cause of science and toleration are about to dedicate a memorial to an intrepid votary and vindicator. Joseph Priestley, born on the 24th of March, 1773, will on the corresponding date of this year be honoured by a statue at Birmingham, the scene of many of his scientific triumphs and sufferings for conscience sake. Throughout a career as chequered as that of most heroes of romance, he found time to lay science in general, and chemistry in particular, under deep obligations; his contributions to Electricity, which secured him the Fellowship of the Royal Society, and his researches on Vision, Light, and Colours, being only less important than his discovery of oxygen, of the renewal of vitiated air by vegetable life, or than his invention of the pneumatic trough, and of the artificial preparation of mineral waters. In psychology he anticipated the conclusions of the materialistic school, and vindicated the doctrine of the association of ideas, afterwards developed by James and John Stuart Mill, against the intuitionalism of Reid and his disciples. Philology, history, and rhetoric were also among the subjects in which he, a theologian by culture and calling, displayed his possession of "the complete professional mind"; while not less in politics than in religion, he vindicated by his writings and by his example the most absolute and uncompromising views of toleration and freedom. In private life he was as amiable and popular as in public he was fearless and formidable; and, while his energies were spent in a long struggle with privilege and prerogative, his sufferings were chiefly at the hands of that democracy whose best interests he advocated, but beyond whose appreciation he soared. Birmingham does herself honour by initiating the movement for a memorial to Priestley, and we trust that her appeal for funds will be liberally answered, not only throughout England, but beyond the Atlantic on whose shores he found an exile's grave.

SEPARATE MEDICAL OPINIONS.

THE record by Sir William Gull of his individual opinion as to the order of occurrence of the Emperor's diseases has naturally been much criticised by the profession and even by the public. The question is one on which the English advisers of His Majesty were hardly entitled to speak, inasmuch as they were unacquainted with the early clinical history of the case. Moreover, it had no practical bearing on the all-important question of treatment, for the actual presence of stone, and of such exhausting distress from it as to call for some operation, had been conceded by all concerned. Further, the origin or determining cause of stone is a subject upon which Sir William Gull has no special authority. Under these circumstances we think it is to be regretted that he felt it necessary to import a difference into a statement which could easily have been made harmonious without any sacrifice of scientific truth. Sir William doubtless had a feeling that his own opinion should be given to the world, but it is this very feeling that is open to criticism. The origin of calculi may be discussed properly in a medical society, but not in a public document on the morrow of an Emperor's death. We do not think that doctors differ more than other people, but the notion that they do is perpetuated by every useless and unnecessary publication of their differences on unpractical and speculative points.

THE SANITARY ADMINISTRATION OF THE PUNJAB.

DR. FAIRWEATHER, Officiating Sanitary Commissioner, in his Annual Report on the Sanitary Administration of the Punjab, states that the year 1870 formed a marked contrast to that of 1869, in the absence of severe epidemics and wide-spread disease of any kind. The most unhealthy month was October, when the general death-rate rose to 39 per 1000, but this was much below what it was for the same month in the previous year, when it attained as high a figure as 50 per 1000. The deaths from snake-bite and wild beasts were 944. At a small village named Ghelab, in the Gurgaun district, where cholera assumed an epidemic form, 43 persons were carried off by that disease in thirteen days. An inquiry into the circumstances attending the outbreak elicited the fact that the first fatal case occurred in an old woman, and that the next persons seized were her relatives and neighbours. In short, all who died lived within 20 paces of her house, with the exception of a family of sweepers, 7 of whom died, who lived 400 paces off. They are alleged to have taken some of the clothing of those who died. No tank-water had been used for two months previously. The people attacked obtained their supply from a well in which the water was about seventy-two feet from the surface, and the soil around composed of a hard and relatively impermeable clay. The first case had been to a village called Mathrá before her seizure, the symptoms of which commenced on her way back, at Kossi, but at neither of these places could the existence of cholera be traced by an inquiry officially instituted afterwards. The large proportion of deaths in the province of the Punjab arose from fevers.

AMERICAN PUBLIC HEALTH ASSOCIATION.

THOSE who have for a generation fought the up-hill battle of sanitary progress in this country will learn with satisfaction, tempered by a regret that their own lines had been cast in less pleasant ways, that in America "the popular appreciation of sanitary organisation and work promises most important results;" that the State Legislatures "freely enact laws relating to the public health"; and that boards of health "are rapidly multiplying."

We extract so much from a descriptive account just received of the organisation and constitution of the American Public Health Association, which was established last year in New York for conference upon sanitary matters, and upon all branches of public hygiene. The Association appears to be thoroughly national in its comprehension, embracing as it does the leading medical officers of health in the various states, as well as others of the profession, statists, and laymen, who are interested in the promotion of sanitary science. Dr. Stephen Smith, of New York, is the president, and Dr. Elisha Harris, of New York, is the secretary of the Association.

BARBAROUS QUACKERY IN A GLOUCESTERSHIRE VILLAGE.

SOMETIMES we have too much sense of the ridiculous aspect of quackery to be greatly angry with the quack, who often serves only to set off the advantages of scientific medicine, and to punish the fools who expect ignorance to do that which science finds difficult or impossible. But when a quack goes into a country village, and pretends to cure a woman afflicted with heart disease and dropsy by puncturing the back with an instrument of torture consisting of twenty needles, and follows this up by the application of an irritant that brings out a pustular eruption over half the back, our indignation is excited. The more so, when death follows steadily upon the operation. Such is the nature of a case which has been the subject of a coroner's inquest at Pucklechurch, in Gloucestershire. Mr. Crossman detailed the facts of the post-mortem, and the barbarous nature of the instrument used. The itinerant operator described himself as Professor James, and when asked of what he was professor, replied, "Professor of my instrument." Mr. C. M. Heim and Mr. J. Ashley agreed with Mr. Crossman in thinking that the operation hastened the deceased's death. The jury found that the deceased died of pulmonary apoplexy consequent on an operation by James, but stopped short of finding him guilty of manslaughter. If any regular practitioner had used means so monstrous and ignorant it is doubtful whether he would have been let off so easily. The medical profession, however, suffers less than the public by the light punishment of quacks who kill by torturing methods. Until the people are educated enough to protect themselves from barbarity like this, surely those who administer the law should do it with a severity that might deter ignorant pretenders from such fatal experiments on suffering human nature.

HABITUAL DRUNKARDS.

REFORM, like charity, should begin at home; and accordingly it is at Edinburgh that an initiative is now being taken for dealing with habitual drunkards. On the 29th inst., a meeting will be held there at which, among other speakers, will be heard Mr. Donald Dalrymple, M.P., the hero and eponymus of the movement. At the select committee, of which that gentleman was chairman, and at which the evidence of experts like Drs. Peddie, Skae, and Arthur Mitchell, all of Edinburgh, was taken, it was proposed that sanataria should be provided for dipsomaniacs, both of the affluent and the pauper class, who should be admitted to those institutions voluntarily or by committal —the latter mode being subject to certain legal restrictions. Inspection of these sanatoria should be made periodically; while at certain of them industrial occupation should be carried on so as to inure the inmates to regular habits, to enable them to earn their maintenance in the institution, and even to afford a surplus for their families. These and other provisions of the proposed legislative enactment were keenly criticised on their publication, and by none more effectively than the Scottish Commissioners in Lunacy. It is with the view of replying to these criticisms and of conciliating popular support for his Bill, that Mr. Donald Dalrymple has convened for the 29th inst. the meeting at Edinburgh.

INFECUNDITY IN FRANCE.

THE Parisian press is discussing in a very serious mood the report just presented by the Minister of the Interior on the census of France for 1872. Within the last six years the population of that country has fallen from 36,469,856 to 36,102,921—being an absolute diminution of 366,935. The Minister of the Interior ascribes this alarming result to the small-pox epidemic of 1870-1; to a reduction in the number of marriages, and to the excess of deaths over births; but, above all, to the two disastrous campaigns of 1870-1. These, however, are but collateral causes; there is an antecedent and persistent one—the artificial limitation of families by means at once unnatural and pernicious. Marriages have not only become rarer in France and contracted even later in life, but they continue to be made more and more artificially unfruitful. The mothers, skilled in the mechanical devices for avoiding conception, are often tempted to form illicit amours, and, the fear of shame being removed, to give free course to their passions. French fiction, drama, and even art, derive most of their incidents

from marital infidelity. The fact is notorious; the cause is equally so; and the results are what we see. After a severe campaign like that of 1870–1, a truly vigorous nation receives a reproductive and reparative impulse. To that impulse, France, like her neighbours, used to respond; but now the spring is broken, and the means of replacing it seem to have passed away with the decline of religious belief, constitutional government, and masculine self-control.

MEDICAL EDUCATION IN ASIA MINOR.

ALL travellers in Asia Minor must be aware of the dearth of educated medical practitioners in that country. With a population of over ten millions, there are but a few army surgeons stationed at widely-scattered military posts, the bulk of the population entrusting their health and lives to a few native doctors of both sexes, whose education has been entirely empirical. A few European or American physicians, who have been sent out by various missionary societies, find their services well appreciated, but their number is quite inadequate to the wants of the population. Foremost among these medical missionaries is Dr. H. S. West, who resides at Sivas, and has enjoyed a large practice among the natives, having performed more than a thousand operations on the eye, and removed over a hundred stones by lithotomy. In his opinion, the native Armenians are many of them, in natural abilities and capability of education, very little if at all behind the natives of more civilised countries, and he believes that many most suitable candidates for medical education might be found among them. He proposes, therefore, to establish a medical department in connexion with the Central Turkey College at Aintab, on the same plan as that at Beirut, which is already doing good work for the Arabic-speaking population of Syria. Dr. West appeals to his professional brethren in America and England for aid in organising the proposed medical school, by which, doubtless, the interests of science and civilisation will be promoted; and we are requested to state that donations of money may be sent to Jay, Cooke, McCulloch, and Co., 41, Lombard-street, and donations of English medical books to Messrs. Trübner, 60, Paternoster-row.

HOSPITAL SUNDAY FOR LONDON.

IT can hardly be premature, after the meeting on Thurs. day last at the Mansion House (of which we give elsewhere a report) to say that at length a Hospital Sunday for London may be regarded as fairly on the way to accomplishment. A council, whose only present defect is its numerical insufficiency, has been elected, and as it includes such names as those of the Bishops of London and Winchester, Canon Miller, Archbishop Manning, Rev. Dr. Binney, Canon Gregory, Canon Liddon, Rev. Dr. Asher, Canon Oakley, Sir Sidney Waterlow, Lord Derby, Lady Burdett Coutts, Miss Nightingale, Mrs. Garrett-Anderson, Sir Jas. Paget, Dr. Andrew Clark, Dr. Glover, with many well-known merchants, bankers, &c., of high repute, it will be obvious that the movement is now started in a manner thoroughly calculated to secure the confidence of the public.

THE MEDICO-CHIRURGICAL SOCIETY OF MOSCOW.

ACCORDING to the *Gazette de Moscow*, a Medico-Chirurgical Society is about to be founded in Moscow, for the promotion of the study of medicine, surgery, and the allied sciences. The greater number of medical men practising in Moscow have given in their adhesion to the project, and the rules of the Society are being prepared. The moral and material status of the Society, and its probable success, observes the *Gazette*, are guaranteed by the fact that members must have the diploma of doctor in medicine.

THE EMPRESS EUGENIE.

NOTWITHSTANDING the great and agonising trials which this gracious and noble lady has undergone during the last few years—trials culminating in the loss of her life-companion at Chislehurst—we are authorised to state that her health is at present remarkably good.

SIR JOHN CORDY BURROWS.

IT is with sincere pleasure that we inform our readers that the honour of knighthood has been conferred upon our excellent *confrère*, Mr. John Cordy Burrows, F.R.C.S., who has been for the third time elected Mayor of Brighton. We feel sure that every inhabitant of Brighton, whether medical or lay, will echo our wish that the worthy recipient of the distinction may live long to enjoy it.

THAT the efficient working of the Adulteration Act is beset with great difficulties no one will deny—difficulties that we imagine never suggested themselves to the promoters of the Bill. It is, therefore, pleasing to note that a happy and easy solution of the question has apparently been arrived at in the Arcadian district of Clerkenwell. At the last meeting of the Vestry of that favoured quarter, it was stated that "the Sanitary Committee thought if it were known that an analyst was appointed, it would deter tradesmen from adulterating their goods, and in the course of a year or two they would be able to dispense with the services of the analyst." There is something positively delightful in the *naïveté* of the foregoing expression of opinion.

OUR able contemporary, the *Allgemeine Wiener Medisinische Zeitung*, on Tuesday, the 7th, entered upon its eighteenth year. In the course of some introductory remarks by its editor, Dr. B. Kraus, reference is made to the contributions on "Ileo-typhus" (after Skoda and Oppolzer), and on medical topics generally by Benedikt, Dittell, Fieber, Gruber, Hermann, Körner, Küchenmeister, Leidesdorf, Neumann, Patruban, Pichler, Rittmann, Rosenthal, and Zeissl. As may be inferred from such a "team," the *Allgemeine Wiener Medisinische Zeitung* keeps its subscribers *en rapport* with all that is newest and best in the physician's art.

THE medical officer of health for Limehouse has brought a new nuisance under the notice of the sanitary authorities of his district. It appears that barges, in their transit through the canal laden with gas liquor, which is said to contain sulphuretted hydrogen and ammonia, are allowed to lie alongside the dwelling-houses, giving off a most horrible effluvium, which Dr. Rogers considers very pernicious in its influence on the system, the immediate effect of inhalation of the gas being headache and nausea. We hope that the committee to whom the matter is referred will lose no time in suggesting means for the suppression of the nuisance.

THE prisoner Mary Ann Cotton, of West Auckland, who is accused of poisoning several persons, was, a few days ago, confined of a daughter in Durham Goal. The wretched woman will shortly be placed on her trial.

DR. ALBINI, of Naples, some time back performed direct transfusion of blood in the case of a young woman under thirty from the carotid artery of a sheep.

WE regret to learn that serious troubles exist in the Edinburgh Veterinary College, imperiling not only its healthy administration, but its vitality.

IN the autumn we described in detail the separate system of drainage in process of being applied to Windsor Castle and the adjoining Crown estates, and then proclaimed an intention of informing our readers whether or not the scheme proved successful. It appears, however, that the recent floods (and, as we suppose, the recent strikes) have delayed the progress of these works, and they are not as yet in actual operation. The farm is, however, fast approaching completion, and it is probable that in a few weeks the entire sewage of the Castle will be diverted from the Thames to the new reservoir near old Windsor lock.

DR. J. C. MORGAN, of Manchester, has gone carefully into the health statistics of the Oxford and Cambridge boat-race. The total number of men who have rowed in the race since its establishment is 295. Of these 253 are still living. Dr. Morgan promises to publish letters from 250 of these survivors, stating their *modus vivendi* and their opinions as to the effects of the race, with its preliminary training, on their systems. In the case of the non-survivors, Dr. Morgan has ascertained the disease of which each died, with the result of showing that only in a fractional number of them were they injured by rowing.

AT the last meeting of the Paddington Vestry it was decided, in view of the contingency of an increase of relapsing fever, to draw the attention of the Board of Guardians to the necessity of furnishing, through their medical and relieving officers, all possible information respecting the sanitary condition of houses in the district. At a meeting of the Marylebone Vestry the question of relapsing fever was also discussed, and steps were taken to provide suitable hospital accommodation for the reception of any patients suffering from the fever.

A DEPUTATION from various boards of Poor-law guardians in Ireland waited upon Lord Hartington last week, for the purpose, among other matters, of asking that half the superannuation allowances to medical officers should be paid from the Consolidated Fund. Lord Hartington feared, however, that a contribution from the Imperial funds towards superannuation allowances might induce too great a liberality in granting them.

THE *Liberté*, a Paris paper, informs the world that the first operation of lithotomy took place on the 14th January, 1474, on the person of a condemned criminal. The operation was successful, and the man received a free pardon from Louis XI. for having indirectly advanced the cause of medical science.

AT the Quarterly Court of the Royal Free Hospital, held on Thursday, the 9th inst., Mr. Thomas H. Wakley, F.R.C.S., and Dr. Alexander Marsden, F.R.C.S. Ed., were, in accordance with the unanimous recommendation of the medical staff, appointed consulting surgeons to the hospital.

AT the special invitation of the Viceroy, Dr. Letheby has gone to Egypt, to investigate the capabilities of the country for the production of beet-root sugar.

M. CLAUDE BERNARD, we regret to say, is so unwell that he has to intermit his course of experimental medicine at the College of France.

THE *Athenæum* states that Dr. Beke will shortly proceed to the East with the object of Biblical explorations.

OPHTHALMIA has broken out among the school-children in the workhouses of St. Pancras and St. George-in-the-East.

AT the London Hospital 70,174 patients were treated during the past year. Occasionally there were over 600 in-door patients.

DR. THORNE THORNE has been prosecuting an inquiry into the existence of scarlatina and enteric fever at Bodlington, Cheshire.

THE St. Pancras vestry have decided to appoint their medical officer of health analyst, under the Adulteration Act, at a salary of £100 a year.

METROPOLITAN HOSPITAL SUNDAY.

A CONFERENCE of ministers and laymen representative of the various religious denominations was held on Thursday last in the Egyptian Hall of the Mansion House, under the presidency of the Right Hon. the Lord Mayor, relative to the proposed establishment of a Hospital Sunday for London. The meeting was numerously attended, and amongst those present we noticed the Right Rev. Bishop Claughton, Archbishop Manning, Rev. Canon Miller, Dr. Sedgwick Saunders, Sir Anthony Rothschild, Mr. Robert Few, Rev. Dr. Kennedy, Rev. Canon Oakley, Rev. Dr. Asher, Rev. H. Allon, Mr. E. B. Martin, Rev. J. F. Kitto, Mr. Jabez Hogg, Mr. E. H. Currie, Dr. Glover, Rev. Mr. Bristow, Mr. Lewis, Rev. Dr. Rigg, Mr. Pitcairn, Mr. Ramsay, &c.

The following resolutions were adopted with remarkable unanimity by the meeting:—

1. "That the success attending Hospital Sunday collections in many of the largest provincial towns induces the belief that this movement will be equally successful in London; it is therefore most desirable that simultaneous annual collections should be made in all places of worship in the metropolis on behalf of the medical charities." Proposed by Rev. Canon Miller, seconded by Rev. Dr. Kennedy, supported by Sir Anthony Rothschild.

2. "That a representative council be elected, by public meeting annually, consisting of not less than twenty-five clerical and twenty-five lay members, to make arrangements for the Hospital Sunday collection." Proposed by Right Rev. Bishop Claughton, seconded by Archbishop Manning.

3. "That the council have power to appoint an annual Committee of Distribution, consisting of members unconnected with hospitals, whose decision shall be final. Proposed by Rev. Dr. Jobson, seconded by Mr. R. B. Martin, supported by Dr. Sedgwick Saunders.

4. "That the Lord Mayor be permanent president and treasurer of the fund, and that the annual meetings be convened by him." Proposed by Mr. Robert Few, seconded by Rev. Prof. Marks.

5. "That the system of distribution be based upon the last three years' expenditure of each institution, after deducting the income derived from endowments, realised property, and legacies exceeding £100." Proposed by Rev. Dr. Davidson, seconded by Mr. Jabez Hogg.

6. "That no institution be admitted to participate in the distribution of the fund if the Committee of Distribution find the cost of its management exceed a reasonable percentage of the whole current expenditure." Proposed by Rev. J. F. Kitto, seconded by Rev. J. R. Bristow, supported by Rev. Canon Oakley.

A cordial vote of thanks to the Lord Mayor having been carried by acclamation, his Lordship said he had never taken any subject in hand in which he felt a deeper interest.

THE EMPEROR NAPOLEON'S AUTOPSY.

THE most important result of the examination was that the kidneys were found to be involved in the inflammatory effects produced by the irritation of the vesical calculus (which must have been in the bladder several years) to a degree which was not suspected; and if it had been supposed, could not have been ascertained. The disease of the

kidneys was of two kinds; there was, on the one hand, dilatation of both ureters and of the pelves of the kidneys; on the left the dilatation was excessive, and had given rise to atrophy of the glandular substance of the organ. On the other, there was subacute inflammation of the uriniferous tubes, which was of more recent origin. The parts in the neighbourhood of the bladder were in a healthy state; the mucous membrane of the bladder and prostatic urethra exhibited signs of subacute inflammation, but not the slightest indication of injury. In the interior of the bladder was found a part of a calculus, the form of which indicated that half had been removed. Besides this, there were two or three extremely small fragments, none of them larger than a hemp-seed. This half calculus weighed about three-quarters of an ounce, and measured 1¼ by 1 5-16th of an inch. There was no disease of the heart nor of any other organ, excepting of the kidneys. The brain and its membranes were in a perfectly natural state. The blood was generally liquid, and contained only a very few small clots. No trace of obstruction by coagula could be found either in the venous system, in the heart, or in the pulmonary artery. Death took place by failure of the circulation, and was attributed to the general constitutional state of the patient. The disease of the kidneys—of which this state was the expression—was of such a nature, and so advanced, that it would in any case have shortly determined a fatal result.

Signed by all present.

J. BURDON SANDERSON, M.D.
DR. CONNEAU.
DR. LE BARON CORVISART.
HENRY THOMPSON.
J. T. CLOVER.
JOHN FOSTER.

Camden-place, Chislehurst, Jan. 10th, 1873, 6.30 P.M.

Sir William Gull left Camden-place as soon as the autopsy was over, and recorded a separate opinion on one point—viz., the origin of the calculus—in the following terms:—

"I desire to express the opinion that the phosphate of lime calculus which formed the nucleus of the mass was the result of the prior cystitis (catarrhus vesicæ), and not the cause of it. This nucleus was of uncertain duration, and may even have been more recent than supposed in the appended report. However this may be, it was encrusted by two distinct and recent formations of crystalline phosphate. The inner incrustation around the amorphous phosphate of lime was dense, and separated from the outer incrustation by a lesser cellular but crystalline deposit of triple phosphate. It seems, to my judgment, more in accordance with clinical experience to regard the cystitis as the prior lesion, and that this, by extension, as is common in such cases, affected subsequently the ureters and pelvis of the kidneys. No doubt, in the later stages of the malady the calculus, by its formation and increase, was an augmenting cause of the lesions.

"The other facts and statements I entirely endorse.

"January 10th, 1873." "WILLIAM W. GULL, M.D.

GRATUITOUS MEDICAL ADVICE.

MEETING OF GENERAL PRACTITIONERS AT THE LONDON TAVERN.

ON Thursday evening, the 9th inst., a meeting of the general practitioners was held at the London Tavern to discuss the evils of gratuitous advice. The meeting was called by advertisement and post-card at the instigation chiefly of Dr. Percy Leslie, of Westminster, who was called to the chair. The meeting consisted of about thirty practitioners, including Dr. Ford Anderson, Mr. H. Nelson Hardy, Dr. Ede, Dr. Patrick Smith, &c. &c.

Dr. LESLIE, at considerable length, set forth the injury done, in his opinion, by hospitals, dispensaries, &c., to the poor, the public, and the profession. He attributed the erroneous opinions abroad as to the merit of hospitals to clergymen and ministers, and he accused hospital physicians and surgeons of robbing their brethren, and of carrying a lie in their right hand by pretending charitable motives in taking hospital appointments. He advocated punishing the physicians and surgeons of gratuitous institutions by refusing to meet them in consultation. The consulting men do nothing for us, he said, but educate us and then leave us to sink to any degradation. We have not this feeling about general practitioners. And Dr. Leslie advocated mutual consultations amongst them. He urged that consultants should be pure consultants, and that such should alone be consulted. The division of the profession into classes is like nothing in any other profession. The chairman intimated that the expenses of the meeting would be defrayed by a non-medical gentleman.

Mr. KISCH proposed to consider the remedies of this state of matters. We should make the reception of charity disagreeable—it should go through the relieving officer. We can't do without consulting practitioners. There must be specialists and differentiation of function, but we ought not to meet any man who trenches on the ground of the general practitioner. He could mention the names of the highest physicians who take less than a guinea. He thought the profession should put its foot on the specialism for the treatment of skin diseases.

Dr. FORD ANDERSON thought the meeting was losing sight of its principal object. The importance of a General Practitioners' Association was to throw a new light on this whole question. He was a member of the Hospital Reform Association. Many meetings were held, but nothing had been done beyond the drawing up of reports. The causes of the evil were public indifference and the rivalry of the hospitals. The great point was that the general practitioners should form themselves into an association to do away with the abuses of the hospitals. Dr. Anderson proposed a resolution to this effect, which was seconded by Dr. Hanks.

Mr. NELSON HARDY supported the resolution.

Mr. WM. HARVEY proposed that a committee be formed from this meeting to carry out the resolution.

Dr. A. GRANT seconded this resolution,

And fourteen gentlemen gave in their names as willing to act.

Mr. WALTER SMITH proposed the Medical Club as the place for the first meeting of the committee (to be carried out if possible).

Votes of thanks to Mr. T. J. P. Jodrell for substantial support in furthering this cause and to the chairman terminated the meeting.

EXAMINATION OF MIDWIVES BY THE OBSTETRICAL SOCIETY.

ON Saturday last four candidates for the diploma of the Obstetrical Society of London passed very creditable examinations. The written questions were:—

1. Mention the duties of a midwife when summoned to, and in attendance upon, a case of labour; and describe a case of natural labour from its commencement to its termination.

2. What symptom during the latter months of pregnancy would lead you to suspect the existence of placenta prævia, and how would you detect it?

3. In cases of sudden hæmorrhage occurring during or after labour, what would you do?

4. How would you advise the bringing up of a child (1) when partly (2) when wholly deprived of its mother's milk?

LONDON INTERNATIONAL EXHIBITION, 1873.

A MEETING of Surgical Instrument Manufacturers was held on Friday, the 10th inst., at 29, St. James's-street, Mr. Louis Blaise in the chair. The conditions imposed by Her Majesty's Commissioners for the Exhibition for 1873 having been fully discussed, it was unanimously resolved:—

1. That the surgical instrument manufacturers do not exhibit unless the conditions requiring their productions to be submitted to a committee of selection be withdrawn.

2. That they may exhibit all the articles of their manufacture as a whole, and not in sections or subdivisions as proposed by the Commissioners.

3. That the condition on which the foreigner and Englishman exhibit shall be one and the same.

RAINFALL AND MORTALITY.

LONDON.

Years.	Mean temperature.	Rainfall.	Death-rate per 1000.
1840	47·7°	18·3 in.	25·0
1841	48·7	33·3	24·0
1842	49·6	22·6	23·5
1843	49·4	24·6	24·7
1844	48·6	24·9	25·0
1845	47·6	22·4	23·2
1846	51·3	25·3	23·3
1847	49·5	17·8	27·0
1848	50·4	30·2	25·8
1849	50·0	23·9	30·1
1850	49·3	19·7	21·0
1851	49·2	21·6	23·4
1852	50·6	34·2	22·6
1853	47·7	29·0	24·4
1854	48·9	18·7	29·4
1855	47·1	21·1	24·3
1856	49·0	22·2	21·1
1857	51·0	21·4	22·4
1858	49·2	17·8	23·9
1859	50·7	25·9	22·7
1860	47·0	32·0	22·5
1861	49·4	20·8	23·2
1862	49·5	26·2	23·6
1863	50·3	20·0	24·5
1864	48·5	16·7	26·6
1865	50·3	29·0	24·6
1866	49·8	30·5	26·5
1867	48·6	28·4	23·0
1868	51·6	25·2	23·6
1869	49·5	24·1	24·6
1870	48·7	18·5	24·1
1871	48·7	22·3	24·7
1872	50·9	30·0	21·4
Av. 1840–49	49·3	24·3	25·2
„ 1850–59	49·3	23·2	23·6
„ 1860–69	49·4	25·3	24·3

ENGLISH TOWNS IN 1872.

Towns.	Rainfall.	Death-rate per 1000.
Salford	48·2 in.	26
Birmingham	47·7	23
Wolverhampton	45·3	26
Sheffield	45·2	26
Liverpool	45·0	27
Bristol	42·3	22
Leeds	41·0	28
Bradford	41·0	26
Portsmouth	36·4	23
Nottingham	36·0	26
Norwich	32·0	23
London	30·0	21

Correspondence.

"Audi alteram partem."

THE EMPEROR NAPOLEON.

To the Editor of THE LANCET.

SIR,—The official medical report of the result of the post-mortem examination of the body of the Emperor Napoleon opens with the following paragraph:—"The most important result of the examination was that the kidneys were found to be involved in the inflammatory effects produced by the irritation of the vesical calculus (which must have been in the bladder several years) to a degree which was not suspected; and, if it had been supposed, could not have been ascertained."

Further on we read that the disease was of two kinds—one consisting in dilatation of both ureters and the pelves of both kidneys, *with destruction from atrophy of the glandular substance of the left kidney*; and the other of subacute inflammation of the uriniferous tubes, of more recent origin.

I must confess that I perused and reperused the paragraph I have just quoted, with the context, with very considerable astonishment; and I was afterwards in no degree surprised at the following remark made thereon by the leading journal of the day:—"A man may still, it appears, die under the hands of the first doctors in the world of a great organic disease without their knowing anything about it."

The comments of *The Times* are perfectly justified by, and are a correct deduction from, the statement that the disease existed to a degree which, "if it had been supposed, could not have been ascertained." But, Sir, I would ask, is this a correct representation of the state of medical science, as respects the case in question? I affirm that it is not.

To quote the official report once more:—"Death took place by failure of the circulation, and was attributable to the general constitutional state of the patient. The disease of the kidneys—of which this state was the expression—was of such a nature, and so advanced, that it would in any case have shortly determined a fatal result."

To put the case in the simplest form, it thus appears that the Emperor died of organic disease of the kidneys, the death being accelerated by the shock of the operation, and, according to the highest medical authority, the disease being undiscoverable in the present state of medical science. It is to this last statement that, as I have said, I demur.

The impaired constitutional condition of the Emperor, if really attributable to the state of the kidneys, must have been brought about by the impairment of the secretory and excretory functions of the kidneys, matters being retained in the blood which, in a healthy state of these organs, are thrown off and are voided in the urine.

The quantity and nature, therefore, of the solid matters contained in such urine, had they been carefully determined beforehand, should, and doubtless would, have revealed the fact that the eliminative powers of the kidneys were impaired, and the conclusion might then have been arrived at with almost absolute certainty that the kidneys were in a diseased condition.

I forbear pursuing the subject further, and refrain from any precise application of these remarks.

I am, Sir, your obedient servant,

January 12th, 1873. ARTHUR HILL HASSALL, M.D.

To the Editor of THE LANCET.

SIR,—An old student of pathology in the school of Great Windmill-street and the wards of St. George's Hospital, I have read the report of the post-mortem examination at Chislehurst in this day's *Times* with the close attention which it deserves. It affords much room for remark, and gives direct challenge to conjecture.

To those who have followed the history and watched the proceedings of the third Napoleon since December, 1852, there is no matter for surprise that his severe, long-protracted illness should have ended as it has done in the early days of 1873. The wonder is that the sufferer has lived so long. He died, in plain phrase, of "stone in the bladder," after two well-conducted operations of anæsthetic lithotrity. Death came at half-past ten in the morning, after, if not during sleep, and was somewhat sudden. From what we now know, it was likely so to happen. A third operation imminent at noon, how well that the last breathings of the patient were not clouded by the vapours of chloroform! As a proximate cause in arrest of the heart's action, no "embolic clot" was needed by the pathologist. Yet to this man, as to most others, death came directly through the blood. From extensive disease, as reported, of a vital organ of elimination, and so of elaboration, from constant physical suffering, from broken sleep, and emotional troubles without end, the blood had been damaged in its entirety, and beyond cure. Charged with refuse material, it had become incapable of animating the several organised structures which grew from it, and which it fed. The exhaustion of its multifarious permanent forces, paraphrased by "shocks to the system," was complete. It had lost its self-clotting faculty, and was living blood no longer. In brain, heart, lungs, all was at an end.

In therapeutics by prevention or remedy, in the bold, thoughtful contrivances and triumphs of scientific surgery, be it ever remembered that in the abundant living blood the material elements of all organised structure are actually and always present, and virtually with them the capacity for all varieties of structural function in health or disease.

By the profession at large, in France as in England, it will be remarked that this interesting "report" is strangely blank on the side where the light of detail is most required. A long-established organic disease of both kidneys is declared, "of such a nature and so advanced that it would in any case have shortly determined a fatal result." Of this disease, "which was not suspected, and if supposed could not have been ascertained," there is in the well-attested report no specification by name, or appearance in detail.

Thus, the question still remains, of what particular disease of both kidneys did Louis Napoleon die? That a disease of such grave importance should be without record in our annals, should find no fixed place in our nomenclature, would be a standing reproach to the collective intelligence of the profession on both sides of the Channel. Among the countless essays, disputations, and dissertations on renal disease that have swarmed through the press for many years past, can no one passage of reference be found that bears on the pathological appearances in question? Have they never been developed through the lens in chromatic splendour on the lithographer's tinted stone? Let us not burst in ignorance. Soon or late a name must be found for the "disease rapidly and necessarily fatal" that suddenly killed an Emperor of the French.

"Atrophy" of one kidney resulting from mechanical distension of its pelvis is not necessarily fatal to an elderly man otherwise physically sound in all the vital structures; nor is "subacute inflammation of the uriniferous tubes arising from the irritation of a phosphatic calculus in the bladder, and of comparatively recent origin." In the case before us the "subacute inflammation" reported of the mucous lining of the bladder may have owed much of its character, in respect of tint and extent of surface, to the "liquid blood" congested and gravitating in the submucous tissues of the organ. It may be suggested that this term of "subacute inflammation," in its double signification of altered structure and perverted action, is always of somewhat uncertain sound in pathological reports. Indeed, from its obtrusive lengthiness of syllable, it has for some years past grown in disfavour with the working anatomist; a shade transcendental, it would seem, in the dissecting-room. The term "cystitis," in its full, angry, mischievous sense, is not endorsed by six of the eminent men who sign the report.

I dismiss without comment the surmise that the "disease," whatever it may have been, of both kidneys began from cystitis — i.e., inflammation of the inner lining of the bladder,—as the "prior lesion."

The two inferences of practical interest that may be drawn from the report as it stands are—that the case in question, under all the circumstances, was not suitable for the serial operations of anæsthetic lithotrity; and that, had the stone been struck and crushed in the early days of 1869, Louis Napoleon might have been now alive.

The public, in France as in England, are already sifting and weighing every symptom and incident of the dead Emperor's closing days. Let no information be withheld from them that the profession can impart. Their judgment, if defective or misled, must not be suffered, in matters that we can correct, to go by default.

I am, Sir, your obedient servant,

London, Jan. 11th, 1873. J. A. WILSON, M.D.

To the Editor of THE LANCET.

SIR,—What is the profession coming to when a man like Sir William Gull makes such a public declaration as he did in the morning papers a few days ago? If he dissented from his colleagues, why not confine himself to the medical journals. I can only say I was astonished on reading the paragraph, and so were others to whom I spoke on the subject.

I am, Sir, yours obediently,

Lewes, Sussex, Jan. 14th, 1873. J. G. BRADEN.

OUT-PATIENT DEPARTMENTS AND PROVIDENT DISPENSARIES.

To the Editor of THE LANCET.

SIR,—While admitting the necessity for a reform of the out-patient departments of the hospitals, you remark that the arrangements actually proposed would merely transfer the feeling of dependence from the paupers to the medical officers; but I am persuaded that if those arrangements were properly understood, no such objection would be entertained. At present, whether at hospitals or dispensaries, everybody is exempt from payment. It is proposed that this should be reversed, and that all should pay who are not entirely destitute. The motive to have recourse to the reserves of medical and surgical skill at the hospitals would, therefore, be as strong as ever. Nay, the disposition to resort to them on the part of the class of cases best suited for hospital practice would be increased, for persons who now refrain from going because the treatment is purely eleemosynary, or who go under some pretence or disguise, would openly apply if a moderate payment had to be made. The patients who pay a small sum for attendance at provident dispensaries are more considerate and grateful than those who frequent free medical charities, the prevailing feeling of these last being that they are only claiming a right. This accords with general experience. What is earned and paid for is always more highly valued than what is received as a free gift. No commercial relation exists between the medical man and the patient, such as can in any way hamper the action of the former. The payments are made to the secretary, the doctor having merely to receive a cheque once a quarter, or once a half-year, from the secretary.

Although the hospitals furnish plenty of interesting and difficult cases, they are deficient in examples of the everyday class of domestic complaints—measles, whooping-cough, teething, and the all-important category of midwifery cases, which form so large a part of the business of medical men. All this would be supplied if students were required, as part of their course, to take a turn at one of the dispensaries of the district, and to accompany the medical officers in their visits to the sick. If medical students had such practice as this, instead of the attendance at a limited number of midwifery cases now required, they would soon become accomplished accoucheurs. But the aspect of the subject which seems to me most full of hope is that, instead of merely collecting the sick in masses in the waiting-rooms of hospitals and dispensaries, they will, to a great extent, be visited in their own homes by intelligent, benevolent, medical men, who, being thus brought into personal contact with the sources of disease, will see at a glance what has to be set right. The ladies, upon whom the burden at present falls in their capacity of district visitors, would welcome such a reinforcement, for, although otherwise well qualified to be the friends and advisers of the poor, they have not studied sanitary science, and they cannot make their voices heard in public as men can. This would be the best move yet made towards the improvement of the dwellings of the poor.

I am, Sir, yours, &c.,

London, January 13th, 1873. C. E. TREVELYAN.

FORCIBLE FEEDING.

To the Editor of THE LANCET.

SIR,—The discussion which was continued last week in your columns on the treatment of refusal of food cannot be regarded as being unworthy of the attention of those members of the profession who have to deal with such cases.

I have fed some scores of patients artificially and by various methods, and yet there is not a single letter which has been published on this subject from which I have not gleaned some valuable suggestions. The fact of a practitioner upholding any one method of feeding to the exclusion of all others is simply ridiculous. Every practitioner should be acquainted with every method of artificial feeding, and should know in what cases these different methods are appropriate.

My object in troubling you with this communication is to

bring before you a somewhat difficult case which occurred in my practice last year. The patient was a young woman of the hysterical temperament, who on becoming insane persistently refused every kind of food. At first spoon-feeding by attendants was resorted to, and answered every purpose; but this process soon failed, and after a prolonged abstinence, the pulse becoming very small and feeble, I determined to feed with the stomach-tube. I usually employ a small key to open the mouth with (which can be obtained at Maw's), which invariably proves a most serviceable instrument. On this occasion, however, the patient firmly clenched her teeth, and they were so white and strong, and fitted so beautifully, that I was unable to find a single crevice into which I could insert the point of the key. The next attempt to open them was made with a thin teaspoon, which I endeavoured to introduce between the teeth, but again unsuccessfully. I should, perhaps, mention here that the patient was laid on her back and held down in the manner recommended by Dr. Williams, of Hayward's Heath. I next poured some beef-tea into the mouth, hoping it would find its way down the throat behind the teeth. This simple proceeding unexpectedly produced the desired effect. The patient coughed, choked, and spat out the whole of the fluid, but in doing so I observed that she opened her mouth and also her teeth to gasp for breath. On repeating the pouring in of the liquid the same thing occurred again, and being this time prepared for it, I thrust in the key, opened the mouth with it, passed the tube, and fed the patient comfortably.

I believe that a patient may reject almost every drop of liquid food, by coughing and spitting it up, if fed with the spoon only, and I also believe that there are cases in which the teeth are so strong and regular, and in which the jaw is so powerful, that nothing short of injuring one of the teeth would open the mouth, if force only were to be relied on; but I do not believe that the most determined patient, provided he was laid on his back, could resist being fed by the method described above. The patient is simply in a dilemma: he must either swallow the liquid or cough it out, and in doing so it is almost impossible for him to avoid slightly opening the mouth. When this is accomplished, the rest of the proceeding is easy enough.

I am, Sir, your obedient servant,

H. SUTHERLAND.

Richmond-terrace, Whitehall, January 11th, 1873.

REFLECTIONS ON THE POSSIBLE MOTIVES FOR THE CORAM-STREET MURDER.

To the Editor of THE LANCET.

SIR,—Various surmises have been hazarded as to the motives for the late murder of the unfortunate woman in Great Coram-street. Some surprise has been expressed at the opinion I have given, that revenge or vengeance is the most probable cause, and I have been asked to give the reasons which influence me in coming to this conclusion.

In the early part of my professional career, when investigating the causes of contagion, in association with the late Drs. Read and Fitzgerald, I examined a woman murdered by a man named Connor—a case which at the time caused as much public sensation as has this Coram-street assassination. In the instance I am speaking of the case was known as the St. Giles's murder, and it was proved that her paramour cut the woman's throat because she had given him a disease under which he then suffered, and which the post-mortem proved she was afflicted with at the time of her death. Subsequent experience has taught me that there are exceptional men in all ranks of society, so morbidly constituted that, when suffering under contagious disease (the result of a dissipated life), they are ready to wreak their vengeance on the individual female who has, or is supposed to have, been the cause of their ailment. I have even known these over-wrought brains brooding for days over their misery, and, failing to discover the true culprit, threaten to avenge themselves on the first woman they met who they had reason to suppose would knowingly communicate disease to those having relations with them. Other practitioners must doubtless have met with men thus morbidly sensitive, and who in the prosecution of their revenge would not scruple to murder one who is supposed to have no friends. Indulgent *confrères* will recollect consultations held upon cases where the present symptoms are by patients attributed to a disease supposed to have been contracted years ago, and which my own assertions, as well as those of the family physician, will for a time allay. Such *malades imaginaires* return again and again to the charge, characterising a phase of life not depicted in the Rake's Progress. I fully believe that the increasing number of undetected murders in London may be attributed to some such cause.

While on the subject of these women I would call the attention of my professional brethren to the deplorable state of morals brought to light by the publication of this Coram-street murder. It but corroborates the daily police reports, as well as the statements to which I called public attention in my paper before the Social Science Association at Plymouth. I have every reason to believe that the women called in the police reports "fast," "gay," and "unfortunate" actually live in some of the most respectable streets, and associate in lodgings with moral young men living in the house; and, further, are the companions of married women who wilfully pretend to ignore the way such well-dressed and lady-like fellow-lodgers gain their livelihood. The landladies, moreover, tacitly connive at their immorality as long as their lodgers earn plenty of money and spend it freely. They only exact that appearances should be kept up for the sake of what they call "the respectability of the house." Recent police reports have corroborated what I have long ago called public attention to—viz., that indiscriminate parish prosecutions of houses of ill-fame have driven the inmates to employ all sorts of subterfuges to obtain lodgings. There can be no doubt (regret it as we may) that the efforts of these well-intentioned but ill-informed associations of worthy men have caused these women, in collusion with men of property, to convert some of the largest hotels in London and environs, as well as the coffee-houses in many of the principal streets, into mere "accommodation houses." At the present moment these associations, whose motives are excellent but whose experience is limited, are carrying out in London a system of repression which has completely failed in Berlin, where repeated raids on houses of ill-fame have been proved to be so injurious to public morals that in the Prussian capital houses are now tolerated by the Government merely to prevent even worse forms of evil springing up. Are we not drifting into the same position? The late Royal Commission on the Contagious Diseases Acts acknowledged that "prostitution was a great fact." My belief is, that it is Quixotic to suppose that a small section of society can, by indicting bad houses, put an end to the evil; but I am equally convinced that we may do much to ameliorate some of its worst effects. Experience leads me to believe that the police authorities, not parishes or associations of private individuals, should indict houses of ill-fame. We should then cease to find a repetition of this Coram-street scandal.

I am, Sir, your obedient servant,

Queen Anne-street, Jan. 1873. W. ACTON.

TREATMENT OF EPISTAXIS.

To the Editor of THE LANCET.

SIR,—I was very pleased to see the letter of Dr. Taaffe in THE LANCET of Jan. 4th, as I feared that the subject on which he writes might drop, and that my object in drawing the attention of the profession to an operation which, although a small one, I think I may designate as barbarous and certainly requiring some alteration, might fail.

All who have had to treat many cases of epistaxis will, I think, agree with me that rather than resort to plugging the posterior nares, as at present performed, we are only too apt to temporise with the difficulty, using inefficient means, day after day, which never place the patient in a state of safety, and leave ourselves in a constant state of anxiety lest we should be summoned again at any moment. The patient, meanwhile, keeps losing blood which, if elderly, and, as generally happens in cases which are the most troublesome, the subject of visceral disease, he is ill able to spare.

What we want is some small handy instrument that we

could apply at once, without skilled assistance, and on which we could rely with confidence to restrain the bleeding.

It was in the hope that some of your readers would come forward to suggest some such instrument that I trespassed on your space before, and I put forward my idea, not as necessarily the right one, but as one that perhaps might be improved upon. I hope, then, that I shall see in your next number more communications on this subject. Meanwhile I beg to forward to you a modification of the plan contained in my first communication, not that I think it would be more efficient, but that the instrument would be more easily applied.

Take a tube five or six inches long; at one end let an elastic bag be adapted, at the other a stop-cock. Before introduction the bag should be invaginated into the tube; this, I think, would be best done by means of a string attached to the fundus of the bag, and passing through the tube, the tube might now be easily pushed along the floor of the nasal fossa. A condensing air syringe would first blow out the bag, and then expand it; let this be drawn well forward into the posterior nares; next let a perforated anterior plug be pushed along the tube well into the anterior nares. Any simple stop placed on the tube would now keep both plugs in position.

Believe me to be yours obediently,

Fulham-road, West Brompton. A. GODRICH.

P.S.—I have not yet had an opportunity of inspecting Dr. Taaffe's instrument, but shall do so as soon as possible. I should feel much obliged if he would state what experience he has had with his plugs, and what amount of success he has met with, as he has omitted to do so in his letter. I have submitted both my plans to Messrs. Louis Blaise and Co., of 67, St. James's-street, who, I trust, will before long be able to produce an instrument that, if not perfect, will in a great measure meet the necessities of the case.—A. G.

OUT-PATIENTS AT OPHTHALMIC INSTITUTIONS.

To the Editor of THE LANCET.

SIR,—An article in your impression of Saturday, on "Out-patients," imputes to the medical staff of the Royal London Ophthalmic Hospital an arrangement so contrary to the unwritten but well-understood code which regulates the limits of hospital and private practice that, as one of the surgeons to the hospital, I ask you in justice to insert in your next number my emphatic denial, as regards myself, of anything of the kind. From my first connexion with this hospital, I have always declined to see private patients within its walls.

I have not a doubt of the correctness of your statement that many persons obtain relief there who are well able to pay for the advice they require, but I think that reasonable care is taken to exclude such improper applicants. To such persons, not of the indigent class, who may come on my days, the porter has always been instructed by me to refer them, without bias, to a list of the entire staff, if they should ask whom they had better consult.

I am, Sir, your obedient servant,

Old Burlington-street, 13th January, 1873. J. W. HULKE.

*** We insert Mr. Hulke's disclaimer with much pleasure, and only regret that it would be impossible for the whole of his colleagues to join in it.—ED. L.

"CAIRO AND ITS CLIMATE."

To the Editor of THE LANCET.

SIR,—Dr. Moritz Furstenberg, in his article on "Cairo and its Climate," which appeared in THE LANCET of January 11th, has thrown out many hints regarding certain forms of disease most benefited by a winter residence in that town. He has, however, left out some important diseases, which, if not cured, are materially relieved by a sojourn at Cairo. Yearly may be seen asthmatic patients at Cairo who are surprised as well as rejoiced that their enemy has entirely left them, and so completely as they have never before experienced, though they have been wintering in the southern parts of Europe years previously. A few inveterate cases do not get so completely cured in the town itself, but a ride or drive to the Pyramids so convinces them of the power of desert air in its purity to cure their malady, that they have recourse to living at Ismailia or Suez, where they can combine hotel comforts with pure desert air. In passing, Dr. Moritz Furstenberg mentions the almost entire absence of acute rheumatism amongst the natives, but has omitted to mention the great curative influence of the climate in cases of subacute and chronic rheumatism. Patients sent to winter in the south of Spain, France, and Italy, suffering from this disease, have received an immense amount of relief from their complaint; but when rain falls, or the temperature is in any way reduced, the disease returns upon them; and I have known of patients who, after remaining a short time in the south of Europe, have been driven further south to Cairo, where in a very short time they get rid of the disease and experience no relapse; and this is brought about by the genial climate—baths, medicines, and diet sharing but little in the cure. Lastly, many forms of mental disease are influenced for good to a greater extent than perhaps by any other climate. We are indebted to a French physician for first pointing to the fact of the absence of any amount of mental disease amongst the modern Egyptians. The air seems to have a peculiar soothing effect on the mind—melancholia, homicidal mania and suicidal, are perhaps the forms most benefited. To the overworked brain, either by excessive literary pursuit or in the race for wealth and position, no town combines so many advantages as Cairo, where the entire change in the people, customs, usages, &c., afford amusement and thought, giving at the same time rest to the brain.

I am, &c.,

Ladbroke-grove-road, Jan. 1873. A. DUNBAR WALKER, M.D.

DREAMS.

To the Editor of THE LANCET.

SIR,—In those dissertations which have appeared from time to time on the subject of dreams, their authors seem to have limited their researches to the elucidation of the cause and nature of these phenomena, but have, as far as I am aware, left untouched a point on which I venture now shortly to theorise—that is, their utility. We all know that Nature does nothing in vain, and whatever be the channel through which she may choose to convey a particular influence, we must assume that this influence is exerted for a salutary purpose. It must be conceded also that many persons who enjoy undisputed soundness both of mind and body are also subject to dreaming.

The question then arises, as I have before implied, "what useful purpose do dreams subserve?" I think that they may be regarded as constituting a salutary provision of nature, operating through an instinctive and unconscious effort of the mind, at a time when the body, from its comparative inertness, both nervous and muscular, can least influence volition, to bring to the surface half-formed impressions or ideas, which, in our waking hours, through interruptions or distractions of various kinds, the mind has failed to bring to maturity, and which might otherwise form an unhealthy reservoir of crude and undigested thoughts. Such half-hatched notions, it may not be too much to assume, would constantly crop up unbidden in a man's busy hours to his surprise and distress; and, if productive of no more serious results, would alarm him, from his inability to trace them to any previous parentage of thought. In a word, although the comparison is hardly admissible, I might liken the operation of dreaming to the use of the safety-valve in a material engine.

I may here ask, Is it ascertained whether lunatics have the power of dreaming; or, if they have not while their disease is at its height, whether the gift is restored as they approach convalescence?

Many of us in our maturer life are not unfamiliar with an awful vision, "founded on facts" (so to speak), from the memory of which the lapse of years has not had power to release the bearded victim—of Dr. Swichtail with uplifted birch proceeding to take vengeance for a false concord; or, it may be, when the sport of a fancy no less vivid, we conceive ourselves, if confirmed bachelors, the present

prey of the altar (slave of the ring) or, *horresco referens*, whether bachelors or not, the halter. A familiar voice or sound recalls us to ourselves, and the mind, relieved of an undefined burden, rejoices in its recovered lightness.

In such and such-like instances I assume that the mind was infected, unconsciously to itself, with some latent and unhealthy element, and that Nature prescribed and administered a dream for its relief.

I remain, Sir, your obedient servant,

January, 1873. BREMENIENSIS.

HEALTH AREAS.

To the Editor of THE LANCET.

SIR,—As differences of opinion are being entertained by many persons relative to the appointment of medical officers of health for large or small rural areas, I beg to give my experience on the subject.

Presiding over rather a large urban area and embracing a small rural district, I am of opinion that no medical officer of health should be appointed for too large a rural area. Having had a most experienced inspector of nuisances under me, I have, nevertheless, been called upon almost daily to investigate and make inspections myself, in order to be fully prepared to give medical legal evidence.

There are some nuisances which require immediate attention, and the officer of health should reside within a reasonable distance of the inspectors. During the summer months, when meat, fish, sausages, &c., are sold to the poor in a state of decomposition, early inspection is required, not only by the inspector of nuisances, but the officer of health has to be consulted, and any delay would frustrate the ends of justice; for instance, meat, fish, &c., purchased overnight and presented in the morning for examination is not received by the magistrates as evidence, and such cases are dismissed by them, as I have proved on several occasions.

It may be said that the inspectors residing in every village could make examinations in all urgent cases; but if the law requires the evidence of a medical man, he must be at all times within a reasonable distance, precisely the same as a general practitioner who is at all times called to see patients.

In conclusion, I would suggest that, in the event of the Government inspectors being determined to recommend the division of counties into large areas, it is of the utmost importance to appoint the parochial surgeons of rural districts as deputy officers of health (sanitary officers) in order to act in cases of emergency; but this would necessarily incur an additional expenditure—unless, however, the consultant medical officer of health (as he might be called) contributes towards the extra expenses, or submits to a reduction of his salary.

I am, Sir, your obedient servant,

January, 1873. MEDICAL OFFICER OF HEALTH.

"THE BEGINNINGS OF LIFE."

To the Editor of THE LANCET.

SIR,—I was much annoyed yesterday on receiving by post the reprint of a review of my work, "The Beginnings of Life," which appeared some months since in the *Medical Press and Circular*. As, after inquiry, I have reason to believe that this pamphlet has been extensively circulated, I am anxious to state that I had no previous knowledge of the transaction, and that it is one altogether distasteful to me.

I am, &c.,

Queen Anne-street, Jan. 15th, 1873. H. CHARLTON BASTIAN.

BIRMINGHAM.

(*From our own Correspondent.*)

THE Local Government Board have lost no time in complying with the wishes of the inhabitants of Moseley. Dr. Ballard has been specially sent down to inquire into the causes of the epidemic of typhoid fever, and after a thorough examination of the infected district, and after conferring with the medical men practising there, has come to the conclusion that the outbreak is entirely owing to impure water and defective drainage. Dr. Ballard has given important advice to the guardians of King's-Norton parish and to the Local Board of Health of Balsall-heath as to the best means of arresting the present and averting any future outbreak of typhoid. Besides the ordinary inspection and removal of nuisances, he enjoined on them the necessity of having the district properly sewered, and the inhabitants supplied with an abundance of wholesome water. He recommended the free use of carbolic acid as a disinfectant both in the vessels employed for the reception of the evacuations of the sick and in those used for washing the linen. Dr. Ballard objected entirely to the system of ashpits and privies, and thought the sooner they were got rid of the better. He suggested that all excrement and ashes should be removed, regularly and systematically, at the public expense. Lastly, he recommended the isolation of all cases of fever, and the setting apart a special building for the reception of fever patients. Balsall-heath, having no medical officer of health, was advised to appoint one at once, and this will forthwith be done. Dr. Ballard believes that the epidemic began in Balsall-heath, and was due to the contamination of the milk supplied to the inhabitants of Moseley by sewage-matter, which had trickled into the well of a milkman, who supplied many of the houses of that suburb. The privy from which the percolation of sewage-matter took place was only nine feet from the well, and although it could not be proved that the water from the well had been used to adulterate the milk, still it was admitted that the milk-cans had been washed out with this water; and Dr. Ballard considered that this was sufficient to account for the poisoning of the milk in the first instance. Dr. Ballard finds, in addition, that nearly all the well-water of the district is rich in chlorides—the quantity in some instances being so large as to render it imperative on the authorities to prevent such wells being any longer used by the inhabitants.

The Town Council of Birmingham are again considering the best means of dealing with the sewage of the town. The works constructed and in operation for the subsidence and deposit of the heavy particles of sewage have already produced a great improvement in the effluent water from the tanks, but it is found that further tank accommodation is wanted to secure the complete clarification of this water. Many members of the Council hesitate to give their sanction to the propositions of the Sewage Committee in consequence of the great expense they will involve; but with the order of sequestration hanging over the heads of the corporation, and likely to take effect in next Easter term, it is mere waste of time to attempt any alteration of the scheme which the Sewage Committee have been adopting, and so far with a very considerable amount of success.

The new Public Health Act has been recently under discussion by representatives of the rural and urban sanitary authorities of the counties of Warwick and Worcester. Mr. Henley attended the conference in the former and Mr. Longe in the latter county, and explained the provisions of the Act, especially with reference to the appointment of medical officers of health and inspectors of nuisances. Lord Leigh moved and Dr. Bucknell seconded a resolution that there should be but one medical officer of health for the whole county of Warwick, exclusive of Birmingham. This resolution was lost, and it was ultimately decided, "That it is desirable to divide the county into two districts: north and south."

At Worcester the same difficulty was experienced in arriving at a decision which would prove agreeable to all the representatives, and the only resolution come to by the meeting was, "That the principle of comparatively wide combinations of sanitary authorities is the best upon which the Public Health Act can be carried into effect."

Birmingham, Jan. 13th, 1873.

LIVERPOOL.

(*From an occasional Correspondent.*)

THE second Sunday in the year is Hospital Sunday in Liverpool, and on last Sunday collections were made in all churches and chapels in and around the town and suburbs, with a unanimity very gratifying, and a heartiness amount-

ing in several cases to enthusiasm. Up to Tuesday evening, the 14th, the local treasurer had been advised of £6000 and upwards collected and paid into the bank, and we are told that £500 additional has been collected and will soon be paid in. It is generally believed that with the Hospital Saturday Fund, which is expected to be much in excess of last year, the total sum raised for the Liverpool charities will not be much short of £10,000. Some of the collections were truly munificent. Upwards of £1500 was raised in three collections—viz., £584 at Childwall Parish Church; £502 at an Independent, and £467 at a Unitarian Chapel. The mayor attended St. Nicholas Parish Church in state.

Obituary.

HENRY DOUGLAS CARDEN, F.R.C.S.

WE record with unaffected sorrow the death, on Sunday, the 22nd ult., of Henry Douglas Carden, Esq., the well-known and eminent surgeon of Worcester. Though Mr. Carden had had some premonitory symptoms of the disease (apoplexy) which terminated his most valuable and beneficent life, he saw patients at his own house so lately as Saturday, the 14th ult., and displayed all his wonted solicitude and discrimination in investigating their ailments and prescribing for their relief. Indeed, however much he had been disposed to withdraw from the toils and anxieties of his arduous profession, his services were, to the last, in such request as to make it difficult for him to free himself from the thraldom of practice. On Tuesday, the 17th, there was a return of the unfavourable symptoms, from which he again rallied, and at his own request he was visited by his friend, Mr. Symonds, of Oxford. The fatal seizure occurred on Thursday morning, and the effect was to deprive him of speech and of the use of his right arm, which he kept raising with his still able limb, and trying to explain to Dr. Inglis, who was in attendance upon him, the nature of his malady and the sensations attending the visitation. Dr. Inglis and Mr. Sheppard remained with him the greater portion of Thursday, and he was again visited by Mr. Symonds on Friday morning, but he never regained consciousness, and breathed his last, spite of all the efforts which medical skill and friendship, amounting to veneration, could suggest, at about eleven on Sunday morning.

Mr. Carden was known to the profession far and wide as the introducer of amputation of the thigh by the "single flap" or "single skin-flap" operation. He had a great dislike to publicity or show; but when it was necessary that he should appear before the public, as at meetings of the governors and subscribers to the Infirmary, to which institution he was first a surgeon and then an honorary surgeon, he never flinched from doing his duty conscientiously, and in a spirit of the most perfect independence. More than all that, whatever he said was advanced in well-chosen sentences, all his arguments were to the point, and his persuasive manner gave them great weight. He was elected a magistrate for the city, but the appointment was simply a compliment, and not the result of any expressed or imaginary desire on his part, for he never qualified.

Perhaps no man enjoyed a holiday more than Mr. Carden. He was a good angler, a good shot, and a shrewd judge of horses—in his younger days riding well to hounds. The subject of our notice was also a connoisseur of pictures, and the possessor of many of great value, which afford proof of his matured taste. He was also fond of horticulture, and devoted much of his leisure time to improving and laying out his pleasure grounds. Mr. Carden's decease will be a subject of deep and wide-spread regret. He was a man that the ancient city of Worcester may well be proud of; and we regret that the exigencies of space will not permit us to enlarge further on the life of one who was a bright ornament to the profession.

BENJAMIN GODFREY, M.D., M.R.C.S., L.S.A.

AT his residence, Carlton House, Enfield, on the 22nd of November, this able and indefatigable practitioner breathed his last, closing an honourable and successful career of twenty years' duration at the comparatively early age of forty-three.

Dr. Godfrey was born at Romsey, in Hampshire, in 1829, and when but fourteen years old he was articled as pupil to a firm of surgeons. At the close of his student's career at Guy's Hospital, in 1852, he became a Member of the College of Surgeons and a Licentiate of the Apothecaries' Company, and in the same year he graduated as M.D. at St. Andrews. Very shortly after graduating, Dr. Godfrey settled at Enfield, taking the practice there of Dr. Astley Holt. At Enfield Dr. Godfrey lived and worked for twenty years, and from what was but a small beginning developed, by his untiring energy, kindness, and skill, one of the largest general practices anywhere near London. By rich and poor alike he was loved as a friend and trusted as a doctor, and at his funeral in Enfield Cemetery, on November 27th, upwards of two thousand friends and patients were present as true and sincere mourners.

In 1855 he wrote a paper on "Porrigo *versus* Eczema," and in 1857 he published in THE LANCET a series of interesting cases of fatal diphtheria, just at the time when the disease was beginning to excite much anxiety in the minds of the profession and the public. In 1856 he wrote on the true use of vaccination, and in 1871 he published his work on the "Diseases of the Hair," which met with considerable success. He had been for many years a member of the Royal Astronomical Society.

Dr. Godfrey's death was somewhat sudden. He was ill but for fourteen days, and this was the first illness he ever had during twenty years that had rendered him unable to do his daily work, though for many years he had laboured under valvular disease of the heart. Cold caught in the recent wet weather was believed to be the exciting cause of Dr. Godfrey's illness; the immediate cause of death was fatal syncope. Sir William Gull most kindly saw his old pupil and friend during his short and severe illness, and all that skill and the kind care of loving and faithful friends could do was done to preserve his life.

WILLIAM GIBNEY, M.D.

BORN of wealthy parents at Dormstown Castle, near Nassau, in Ireland, in 1794, the deceased gentleman, after the usual preliminary courses, graduated at Edinburgh in his twentieth year. Thereafter he entered the army as assistant-surgeon in the 15th Hussars, and was present at Waterloo, where he amputated his colonel's thigh. After the peace, he settled as a practitioner in Cheltenham, whose mineral waters he described in a highly popular treatise. He was also physician to the General Hospital and to the Female Orphan Asylum there, and devoted himself sedulously to those charities. The doctor was last in the list of that type of physician who seemed peculiar to Cheltenham—a type immortalised by Theodore Hook and Lockhart,—which included Boisragon, Newall, Allardyce, Cannon, Ch. Seager, and the Fowlers.

A martyr to gout, he had, in 1863, to retire from the career in which he had won such eminence, and spent the evening of his days at Totnes and Torquay. Before leaving Cheltenham, a testimonial, consisting of £600 with a beautifully illuminated address, was presented to him by his friends and patients; especially by the supporters of those institutions in which he had served as physician for forty years. This mark of esteem was followed by his being made consulting physician to the hospital, in recognition of which he presented his library, a collection of rare medical works, to the institution.

Dr. Gibney died at Bath, on the 4th ult., the last of an excellent school of practitioners, who combined professional skill with scholarly tastes, and a high sense of honour with a winning address.

ROBERT JOHNSTON, L.R.C.S.I.

A DEPLORABLE accident has deprived a professional brother of life and County Down of an able and accomplished practitioner. Mr. Johnston, on his way from Crobane to Newry, on the 10th inst., was thrown from his horse, kicked on the head, and almost instantaneously killed. The animal, having taken fright, had tried to run off, and in the struggle its rider met with the fatal accident.

The body was conveyed to a house in the vicinity, where it was found that two severe cuts had been sustained on the right side of the head, from which the blood flowed profusely. It was conveyed to Newry that night. Mr. Johnston was highly and deservedly popular with his extensive *clientèle*. His education was prosecuted at Trinity College, Dublin, and at the Royal College of Surgeons, where he took his diploma in 1853, besides qualifying as licentiate in midwifery at the Rotundo Hospital. He held many appointments, and fulfilled their duties with energy and skill. He was medical officer to the Bessbrook Spinning Company; sometime surgeon to the Government Emigration Commission; and dispensary surgeon to the Newry division of the Union. He was in his fifty-seventh year, and leaves a large family.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Court of Examiners on the 14th and 15th inst.:—

E. W. H. Sall and R. T. Sandiford, Charing-cross Hosp.; J. H. Harricks, G. H. Wilson, T. R. Jones, and C. E. Abbott, Liverpool; F. T. Twining, Cambridge; A. F. Sargent, St. Mary's Hosp.; R. Podmore, St. Thomas's Hosp.; W. Berry, Glasgow; T. Smailes and P. H. Metcalfe, Leeds; A. W. Prichard and F. G. Stevens, Bristol; J. G. Tindle, Newcastle-on-Tyne; J. C. P. Muir, Univ. Coll.; G. E. Welford, Aberdeen; W. H. E. Burke, Galway, Edinburgh, and Univ. Coll.; J. S. Wilson, Aberdeen and Charing-cross Hosp.; S. H. Masters, Manchester; W. C. Cooke, King's Coll.; G. B. Ferguson, St. Bartholomew's Hosp.; C. N. Hayman, Edinburgh; J. Davies, Westminster Hosp.; E. R. Gill, London; R. Bedford, Bombay; J. T. Appleby, Manchester; W. Hindhaugh, Newcastle-on-Tyne; P. Bruce, Middlesex Hosp.; H. Donaldson, Charing-cross Hosp.; H. A. Lovett, W. C. Morris, B. Jones, J. F. Breach, H. Duke, and J. B. Richardson, Guy's Hosp.; D. Lloyd, G. W. Pyburn, and A. B. Kelly, Univ. Coll.; A. E. Procter, E. F. Luke, E. Cretin, C. M'Callum, and H. Lupton, St. Bartholomew's Hosp.; R. Robinson, St. Mary's Hosp.; W. Vernon, Glasgow; T. D. Watson and F. H. Kyngdon, London Hosp.; C. F. Knox, St. George's Hosp.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Jan. 9th:—

Cumming, William Richard, East Acton.
Groves, Henry Joseph Firth, Dorchester.
Kerr, George Edwardes, Wickham Market.
Llewellyn, Rees Ralph, Whitechapel-road.
May, William Allan, Colney-hatch.

As Assistant in Compounding and Dispensing Medicines:—

Druce, George Claridge, Northampton.

The following gentleman also on the same day passed his Primary Professional Examination:—

Powell, Harold M., Guy's Hospital.

SCARLET FEVER is reported to be prevalent in several parts of Lancashire.

NAVAL MEDICAL SUPPLEMENTAL FUND. — At the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 14th instant, Sir Edward Hilditch, Inspector-General, in the chair, the sum of £90 was distributed among the various claimants.

THE GUILDHALL LIBRARY.—Dr. Sedgwick Saunders, a member of the Court of Common Council, has given notice of a motion having for its object the extension of the hours during which the building should remain open, and the desirability of throwing the library freely open to the public, and of establishing a free circulating branch.

BEQUESTS TO MEDICAL CHARITIES.—Mr. W. L. Horn, of Sheffield, bequeathed £2000 to the Sheffield Infirmary, and £100 to the Sheffield Public Hospital. Mr. Edward Henry Beddington, of Lancaster-gate and Monkwell-street, bequeathed £100 each to the German Jews Hospital and the London Hospital.

MR. JUSTICE DENMAN, on Saturday, on the application of Mr. Serjeant Ballantine, granted a writ of *certiorari* to remove into the Court of Queen's Bench any indictment which might be found against the persons connected with Dr. Kahn's museum, who were committed for trial by the magistrate at Marlborough-street, on a charge of publishing an obscene book. The defendants were admitted to bail—themselves in £200, and two sureties in £100 each.

Medical Appointments.

ADAMS, W., F.R.C.S.E., has been appointed Consulting Surgeon to the National Orthopædic Hospital, Great Portland-street.

BECK, M., M.B., F.R.C.S.E., has been appointed an Assistant-Surgeon to University College Hospital.

BETLEY, Mr. R., Analytical Chemist, has been appointed Public Analyst for the Borough of Wigan.

CANNELL, J., M.D., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed House-Surgeon to the Wallasey Dispensary, vice Geo. Clement Searle, M.R.C.S.E., resigned.

CARSON, A. T., M.D., has been appointed Medical Officer for the Portrush District of the Coleraine Union.

ELLIS, H. D., M.R.C.S.E., has been appointed Medical Officer of Health for the Urban Sanitary District of Poole.

FARREN, N., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed Medical Attendant to the Royal Irish Constabulary at Buncrana, vice Hunter, deceased.

FLETCHER, Dr. G., has been appointed Medical Officer and Public Vaccinator for the Earl Soham District of the Plomesgate Union, Suffolk, vice Andrew, resigned.

FORD, T. H., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed House-Surgeon to the Leith Hospital, vice D. T. Taylor, M.B., C.M., deceased.

GARRARD, W. A., L.S.A.L., has been reappointed Assistant House-Surgeon to the Derbyshire General Infirmary, Derby, for six months.

GILLARD, R., M.R.C.S.E., has been appointed Medical Officer for District No. 7 of the Parish of St. Mary, Lambeth, vice Hutcheon.

GOWERS, W. R., M.D., has been appointed an Assistant-Physician to University College Hospital.

GREGORY, J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Surgeon for the Rusholme and Moss-side District of the Chorlton upon-Medlock, Rusholme, and Moss-side Dispensary, Manchester, vice Fred. Melland, M.R.C.S.E., resigned.

INGLIS, A. M., M.D., has been appointed Physician to the Worcester Ophthalmic Institution, vice Williams, deceased.

JONES, T., M.B., M.R.C.S.E., has been appointed Senior House-Surgeon to the Royal Infirmary, Manchester, vice J. G. Gordon, M.B., C.M.

KINGSFORD, Mr. P., has been appointed Junior Resident Medical Officer to the Royal Free Hospital.

LITTLE, W. J., M.D., M.R.C.P.I., has been appointed Consulting Physician to the National Orthopædic Hospital, Great Portland-street.

LYELL, R. W., M.D., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Infirmary, Manchester, vice H. A. Lediard, M.B., M.R.C.S.E.

MORRELL, R. B., M.R.C.S.E., has been appointed Medical Officer for District No. 4 of the Houlton Union, vice Whitby, resigned.

NETTLESHIP, E., F.R.C.S.E., has been appointed a Surgeon to the Royal South London Ophthalmic Hospital, St. George's-cross.

PALMER, W. G., M.R.C.S.E., L.R.C.P.Ed., has been appointed Medical Officer of Health for the Town of Loughborough, Leicestershire.

PARMITER, H. R., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Winfrith District of the Wareham and Purbeck Union, vice W. S. Granger, M.R.C.S.E., resigned.

PEARSON, J., M.D., has been appointed Medical Officer of Health for the Urban Sanitary District of Maryport, Cumberland.

PEIRCE, J. E., M.R.C.S.E., has been appointed Medical Officer of Health for the Hill District of the Cricklewood Rural Sanitary District.

POPE, H. C., M.R.C.S.E., has been appointed (*pro tem.*) Medical Tutor and Joint Demonstrator of Anatomy at Queen's College, Birmingham, vice R. W. Edginton, elected House-Surgeon to Addenbrooke's Hospital, Cambridge.

POYTLE, E. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Public Vaccinator for the St. Luke District of the Holborn Union, vice Yarrow.

SUTTON, J. M., M.D., M.R.C.P.L., F.R.C.P.Ed., has been appointed Medical Officer of Health for the Urban Sanitary District, Oldham.

TWEEDY, J., M.R.C.S.E., has been appointed Assistant Medical Officer, Skin Department, University College Hospital.

TYTLER, P., M.B., C.M., has been appointed House-Surgeon to the Clinical Hospital and Dispensary for Children, Manchester, vice Richard Crean, L.K.Q.C.P.I., L.R.C.S.I.

WEBB, T., M.R.C.S.E., has been appointed Medical Officer of Health for the Rural Sanitary District, Cheadle, Staffordshire.

WIGNER, Mr. G. W., has been appointed Public Analyst for Plumstead, Kent.

Births, Marriages, and Deaths.

BIRTHS.

ALLEN.—On the 14th ult., at Seehore, Central India, the wife of W. E. Allen, F.R.C.S.E., Surgeon to the Political Agency and the Bhopal Batallion, of a daughter.

BRAMWELL.—On the 11th inst., at North Shields, the wife of Byrom Bramwell, M.B., of a son.

CRONIN.—On the 8th inst., at Westbourne-place, Queenstown, Ireland, the wife of J. D. Cronin, M.D., F.R.C.S.E., Staff Surgeon (retired list), of a daughter.

GIBSON.—On the 7th inst., the wife of J. C. Gibson, M.R.C.S.E., of Droitwich, of a son.

LAND.—On the 14th inst., at Exmouth, Devon, the wife of W. J. Land, M.R.C.S.E., of a son.

SKEGG.—On the 1st inst., at Northumberland-street, Trafalgar-square, the wife of J. J. Skegg, L.R.C.P.Ed., of a daughter.

MARRIAGES.

FLETCHER—STOGDON.—On the 9th inst., at Barton Stacey, Dr. Geo. Fletcher, of Earl Soham, to Annie, daughter of the Rev. A. H. Stogdon.

HARLEY—JENKINS.—On the 2nd inst., at the Parish Church, Bromyard, John Harley, M.D., of Upper Berkeley-street, to Maria Jane Shelton, daughter of the late Wm. Jenkins, Esq.

VOSPER—JAKINS.—On the 9th inst., Mr. Wm. Vosper, of Plymouth, to Alice Mary, daughter of I. N. Jakins, Surgeon, of Osnaburgh-street, N.W.

DEATHS.

BANCROFT.—On the 28th ult., S. N. Bancroft, L.S.A.L., of Great Bolton, aged 70.

COLES.—On the 17th ult., at Vienna, G. Coles, M.R.C.S.E., formerly of Woodstock, aged 66.

COTTLE.—On the 8th inst., at Farley Lodge, Hill-lane, Southampton, J. M. Cottle, L.R.C.P.L., aged 69.

HUDSON.—On the 3rd inst., at Shepton Mallet, Somerset, T. St. John Hudson, M.D., eldest son of the late Edward Hudson, Esq., of Woodview, Glanmire, Co. Cork.

RUDDOCK.—On the 7th inst., at South Brook-street, Leeds, William P. Ruddock, M.R.C.S.E., aged 61.

SMEDLEY.—On the 28th ult., N. Smedley, L.R.C.P.Ed., of Bolton, aged 23.

SMITH.—On the 23rd ult., at Bayview-terrace, Londonderry (of rheumatic fever), Edward Smith, M.B., Resident Medical Superintendent of the Londonderry District Lunatic Asylum, and Assistant-Surgeon to the Londonderry Light Infantry Militia (fifth son of the late Rev. James Smith, Rector of Upper Cumber, in the Diocese of Derry), aged 36.

Medical Diary of the Week.

Monday, Jan. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
SOCIAL SCIENCE ASSOCIATION. — 4 P.M. Mr. John Liddle, "On the Defects of the Sanitary Provisions of the Building Act, 18 & 19 Vict., cap. 122, with Suggestions for their Amendment."
MEDICAL SOCIETY OF LONDON.—8 P.M. Lettsomian Lectures: Mr. Henry Lee, "On Urethral Discharges." No. II. Prostatic Discharges.

Tuesday, Jan. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION. — 3 P.M. Professor Rutherford, "On the Forces and Motions of the Body."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Anchylosis of the Hip after Disease; a Fœtus with Arrest of Development of the Arms and Legs; Spindle-celled Sarcoma of the Liver; Stomach from a Case of Poisoning by Hydrofluoric Acid; Membranous Casts from an Intestine; Aneurism of the Thoracic Aorta; Extensive Disease of the Femur; Inflammatory Disease of the Tendons of the Fingers; &c. &c.

Wednesday, Jan. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Jan. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Debus, "On Oxidation."

Friday, Jan. 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Birks: "Analogies of Physical and Moral Science."
QUEKETT MICROSCOPICAL CLUB. — 8 P.M. Dr. Robt. Braithwaite, "On the Histology of Plants. Part I. The Structure of the Plant-cell."
CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Burney Yeo will exhibit a Boy with Congenital Absence of the lower portion of Pectoralis Major.—Dr. Nieden, "On a Case of Lesion of the Upper Dorsal portion of the Spinal Cord, with excessive Lowering of Temperature and Pulse."—Mr. Teevan, "On the Results of Twelve Cases of Operations for Stricture."

Saturday, Jan. 25.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Edward A. Freeman, "On Comparative Politics."

Notes, Short Comments, and Answers to Correspondents.

ARTISANS', LABOURERS', AND GENERAL DWELLINGS COMPANY.

CRIME, drunkenness, and disease in our thickly populated localities are in nearly every case attributable to the dark, filthy, undrained, and crowded dwellings of the working people. To replace these by light, clean, healthy, and commodious houses, and to encourage working men to exercise sobriety and industry, so as to become the actual freeholders of such homes, is the first step towards the reform of the lower classes. The Company (limited), whose title we have given above, have spent over £50,000 in this enterprise in London, Liverpool, Manchester, Birmingham, Bradford, and other places, with the most gratifying success. "Nothing," said the Deputy Recorder of London, in formally introducing the Lord Mayor elect to the Lord Chancellor, "nothing is more fruitful of good, both physical and moral, than in providing improved dwellings for the working classes." To which Lord Selborne replied, that "in an undertaking of such vital importance these efforts should be vigorously seconded throughout the country, and they would be productive of universal benefit." The Company's president is Dean Stanley, and among its most active supporters are Archdeacon Sandford and Canon Kingsley. The profession should add whatever encouragement it can afford to the undertaking. It may be well to state that the Company's shares are £10 each, and the lowest annual dividend has been 6 per cent. The shareholders include some of the highest noblemen in the land; while bishops, professional men of every class, capitalists, and merchants, are conspicuous as retainers of shares from £120 downwards.

Mr. H. P. Lee, (Shaftesbury.)—Consult some medical friend in the matter.

INCOME-TAX.

To the Editor of THE LANCET.

SIR,—I am glad to see that you have opened your columns for a discussion on the hateful and unjust income-tax.

My experience of appealing is not so pleasant as that of your correspondent, "J. J." I keep two horses and carriages, and on being surcharged as usual, I appealed. The surveyor of taxes looked over my list of deductions, and, seeing nothing to which he could reasonably demur, asked me if I had ever driven my wife out with my own horse and carriage. To this I declined an answer, and one of the Commissioners said it was foolish to suppose that I should hire a horse and trap when I had two doing nothing. The surveyor then coolly crossed off the allowance for expenses of one horse and carriage, although they were kept solely for professional purposes, and he had *no proof* that they had been otherwise used. I wrote to London to complain, but got the usual evasive answer, that the Commissioners were the proper people to decide such questions. I knew that. But why don't the Commissioners decide? Because the surveyor is practically both *advocate and judge*, and has the unfair advantage of being in the room when you are ordered to retire. He can then tell any cock-and-bull story he likes, and as you never hear it, you have no opportunity of refuting it.

I do hope that the medical profession will take this matter up with the utmost vigour, and make their voices heard at the next general election. Might I recommend to the graduates of the London University to give their member a bit of their mind on the subject. It is the most irritating and annoying tax that country medical men have to endure. Their incomes are exposed to their neighbours, and in small places, where everybody knows everybody else's affairs, it is most aggravating.

I am, Sir, yours, &c.,
January, 1873. A COUNTRY DOCTOR.

Chemist.—See first of all to the vaccination or revaccination of the household. It would be well to apply the measure to the whole house if a small one. The room ought to be vacated and thoroughly fumigated, the woodwork and floors well washed, and the windows left open for several days. Of course care should be taken to have all clothing disinfected by dry heat or placed in boiling water.

H. W. (Liverpool) is thanked; but the measure suggested is not likely to prove efficacious in all cases.

Mr. R. Marley, (Bromyard.)—It has not escaped us, and will, of course, be noticed.

THE DRUITT TESTIMONIAL FUND.

MR. HAYNES WALTON, the Treasurer, begs to acknowledge the receipt of the following sums since Wednesday, the 1st of January:—

	£	s.	d.
Mrs. Brand	10	10	0
Messrs. S. Maw, Son, and Thompson	10	10	0
Sir C. Locock	10	0	0
Mr. E. Sercombe	5	5	0
Dr. Geo. Budd, Barnstaple	5	5	0
Mr. T. Paget, Leicester ...	5	5	0
Mr. S. Swaith Brown... ...	5	0	0
Mr. Leggatt...	3	3	0
Dr. Letheby...	2	2	0
Mr. Tilley	2	2	0
Mr. J. S. Bartrum, Bath ...	2	2	0
Mr. W. T. Harris, Worthing	2	2	0
Mr. F. S. Worthington, Lowestoft...	1	1	0
Dr. Maul, Southampton ...	1	1	0
Mr. J. E. Evans	£1	1	0
Mr. Norris Davey, Romford	1	1	0
Dr. Whitehead, Manchester	1	1	0
Mr. Liddle	1	1	0
Dr. Iliff...	1	1	0
Dr. Stevenson	1	1	0
Dr. Tripe	1	1	0
Mr. C. Wilcox, Wareham ...	1	1	0
Dr. R. Fowler	1	1	0
Mr. Lord	1	1	0
Mr. Spencer Watson	1	1	0
Dr. A. Carpenter, Croydon	1	1	0
Mr. Jn. Gay (second subscription)	1	1	0
Mr. C. Lingen, Hereford ...	0	10	0

Subscriptions may be sent to the Treasurer, Mr. Haynes Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. T. Norton, 6, Wimpole-street; or may be placed to the account of the "Druitt Testimonial Fund," Union Bank, Argyle-place, Regent-street, W. Amounts received will be acknowledged in one or more of the medical journals.

ENTERIC FEVER IN INDIA.

IN the record of some cases of enteric fever which recently appeared in the *Indian Medical Gazette*, attention is called to the fact that errors are likely to occur if only morning and evening observations of temperature are taken; for in many cases a difference of from one to three degrees of Fahrenheit took place in the space of four hours. The author of the paper states that he has met with these comparatively sudden variations of temperature, which reach the maximum in agues, in many cases of typhoid fever in India; and he asks whether they do not suggest the existence of a more than ordinary connexion between these two diseases, and whether such connexion be not one of a common causation, and if we ought not to look to vegetable rather than animal decomposition for the principal factor of typhoid fever in that country? This circumstance may, he thinks, afford a clue to the difficulty that so often attends the diagnosis in many Indian fevers. He coincides with Dr. Harley in believing that there is a variety termed paludal enteric fever, and that it is the most common in India. A similar causation was advanced lately by a number of American practitioners in a Report on the Causes and Prevalence of Enteric Fever. Dr. Murchison and other observers, especially some army surgeons, have also adverted to the occasional presence of a malarial element in cases of this fever; and we think the exact connexion, if any, is one that requires to be more carefully worked out than has yet been done.

Dr. Gordon's communication is acknowledged with thanks.

COSTLESS VENTILATION.

To the Editor of THE LANCET.

SIR,—The first system of costless ventilation suggested by Mr. P. Hinckes Bird was adopted by me more than twenty years ago, and communicated to a great number of friends. One of its chief advantages is, that if the board used be deep enough, you may modify the opening between the meeting rails in the middle of the window as you please. But I use a very important adjunct to Mr. Bird's plan described in your number of the 4th instant—namely, I have a sliding board which will fit any of the usual windows in the United Kingdom. Abroad the plan is useless, as the main opening of the windows is vertical. The board should be as thin as the sliding system will admit, to prevent any admission of air at the bottom.

I have studied all systems of ventilation for many years, and the very best which I have ever known is as follows:—Air always affects surfaces. Have a slit two or three inches deep made to the outward air, quite close to the ceiling. The air will run along the ceiling without the slightest draught in the room, and diffuse itself gradually downwards. The system is Mr. Squire's, the Queen's chemist. I have several times purified crowded rooms completely by this means. How far an opening over the inner door may also let out hot air, or whether it would divert the course of the air from the ceiling, I have not tried; but it would be worth trial. A Sherringham's ventilator would be an addition to the opening to the outward air, as you may close or open it at any angle.

I am, Sir, your obedient servant,

Biarritz, Jan. 9th, 1873. C. DRISCOLL, M.A.

Mr. W. Davenport.—We are unable to comply with our correspondent's request, as it is contrary to our custom to do so; but he can have no difficulty in obtaining the name of a respectable practitioner in his own neighbourhood by inquiring among his friends.

GEOPHAGIE AND EARTH-WORM EATING.

To the Editor of THE LANCET.

SIR,—A peculiar case of this kind came under my observation. A little girl, brought up under the care of a book-worm or much-reading person, being much left to itself, everything found its way to that common receptacle, the child's mouth. She learnt to lick earth and eat worms, cormorant-like, with a live eel in its mouth. I have seen a large worm writhe and twist, one end under her chin, then up in and round about her nose, while it was being slowly eaten, sucked, and enjoyed. She became thin and sallow in complexion, and suffered from dysentery, or what latterly might be termed incontinence of fæces. After treatment she left off the habit from shame and the raillery of her school-fellows; but long after this she had many a luxurious bite of snails on dewy mornings. She grew up to be a strapping lass. A little horsey and somewhat fast—riding astride on bare-backed horses, delighting in male attire, &c. A friend, cognisant of her habits, informs me that she has either entered upon or contemplates study for the medical profession in the metropolis of the north.

Yours truly,

Church Stretton Private Asylum, Jan. 9th, 1873. WM. HYSLOP.

TIVERTON INFIRMARY.

THE alterations and additions suggested by the ex-medical officers seem reasonable. We should be glad of information as to the ultimate form of the rules.

RELAPSING FEVER.

To the Editor of THE LANCET.

SIR,—It may not be without interest to note that I have met with one well-marked case of relapsing fever in this district.

My patient is a woman a little over forty, and, having been very intemperate in her habits, her constitution is very much broken down. Her first attack had all the usual symptoms of fever, accompanied by copious bilious vomiting, and inability to retain food. There was marked sallowness of the skin. After a week the fever abated, the tongue became clean, and the sickness ceased. There was great prostration of strength. In five days the fever returned, with the same symptoms, and, in addition, great pain in the legs, especially over the tibiæ. The patient cries out whenever the legs are touched. There is no redness or swelling of the limbs.

I have not seen or heard of any other similar case in this part of the country. Your obedient servant,

ALEX. K. DYER, M.D. Edin.

Sutton-in-Ashfield, Notts, Jan. 13th, 1873.

SANITARY INSPECTION IN EDINBURGH.

DR. LITTLEJOHN, the medical officer of health for Edinburgh, reports to the Town Council that there is ample work for four additional inspectors, who, with the two officers of police at his disposal, would give him a staff of six individuals. All these inspectors would every evening write out a statement of the day's work, which would be submitted next morning to the medical officer, who would give instructions accordingly. On receiving these instructions the inspectors would start on their daily rounds. Their daily statements would be tabulated and condensed so as to be submitted to the fortnightly meetings of the Public Health Committee, together with the suggestions of the health officer. With such organisation Dr. Littlejohn would be able to cope with the sanitary defects of Edinburgh, but not till then.

Mr. J. Waring-Curran.—Our correspondent's letter shall be kept in mind.

RELAPSING SMALL-POX.

To the Editor of THE LANCET.

SIR,—Having seen an account of some cases of recurrent small-pox recently reported by an American physician, I thought the particulars of the following case, which came under my notice during the past week, might not be unacceptable to those who take an interest in the history and literature of that disease.

Jas. H——, aged twenty-three, successfully vaccinated when four months old, was attacked for the first time with small-pox of the confluent type on the 20th of October, 1872. He was sent to hospital, where he remained for eight weeks, when he was discharged cured. Resumed his work in Her Majesty's Victualling-yard, Deptford, on January 1st, 1873, and sickened on the same date. When seen on the 3rd he was literally covered from head to foot with small-pox pustules, and evidently a second time of the confluent type. I presume every medical man must have seen cases of small-pox recurring a second and even a third time after a lapse of some years in the same person; but it is the first time I have seen a relapse immediately after convalescence from small-pox.

The patient's mother is pitted with small-pox marks, and has had the disease a second time, and there is a family history of susceptibility to small-pox on the mother's side. Yours truly,

Lewisham, Jan. 8th, 1873. P. KAVANAGH, M.D.

Anti-Humbug.—The Medical Council is not likely to interfere in the case. The circular is very objectionable; the canvassing the patients of other medical men equally so. The best thing to be done is for the profession of the neighbourhood to meet and express a collective opinion on the subject. As part of a general question of great seriousness, it may, perhaps, have our further attention.

Mr. Fairlie Clark's letter shall appear next week.

ACUTE RHEUMATISM AND CHOREA.

To the Editor of THE LANCET.

SIR,—I have under my care at present a case very similar to that recorded by Mr. Land in your journal of the 4th inst.

Miss M. E——, aged sixteen, when first seen on Dec. 7th, 1872, was suffering, in common with two younger sisters, from severe catarrh, accompanied with a very irritable cough and severe headache. The others recovered; but on the 12th Miss M. E—— presented well-marked rheumatic inflammation of both feet and ankles, and on the succeeding day at noon her temperature was 102·6°; pulse 112. The rheumatic symptoms, which were limited to the feet and ankles, gradually disappeared, and on the 21st the patient was able to be down stairs. On the 24th, I found well-marked choreic movements, principally affecting the left arm and leg and the face. On Jan. 7th the right hand became swollen and painful, and on the 8th the left shoulder followed suit. Simultaneously with the return of the rheumatic symptoms the choreic movements became very much less, although they have not entirely ceased. The heart-sounds indicate nothing more than irregular muscular action of the organ.

The only therapeutic point worthy of mention is that chloral was very useful in combating the difficulty the patient had in getting to sleep—a difficulty apparently due to the restlessness induced by the movements.

I am, Sir, yours, &c.,

Islington, Jan. 9th, 1873. FRANCIS JOHN BUCKELL, M.B. Lond.

Mr. John Noble.—The Secretary to the Society for the Suppression of Vice will furnish our correspondent with all particulars.

E. C.—By Governor's letter.

"A DRINKING DRUGGIST."

OUR contemporary the *Pall Mall Gazette* comments on a late police case:—

"It would seem that there is a chemist residing in the neighbourhood of the Westminster Police Court whose mode of dispensing his drugs is not such as to inspire confidence in the minds of his customers. A 'gentlemanly young man' applied the other day to Mr. Arnold for advice under the following circumstances:—He stated that he went that morning into a chemist's shop in the neighbourhood of the court, and, after waiting for twenty minutes to be served, 'was surprised to find the keeper of the shop crawl up from off the floor fearfully drunk,' and ask him what he required. The 'gentlemanly young man,' however, wisely declined to make any purchase, and he now wished to know whether the chemist could not be punished for carrying on his business while in such a condition. The applicant remarked further, that while he was in the shop a woman came in with a child, and complained that the chemist had given her a powder for her baby which had greatly injured it. The neighbours said he was 'eccentric,' and the police reported that frequent complaints were made of wrong drugs being served by the chemist. Mr. Arnold pointed out to the applicant that he could not prevent a man from getting drunk in his own house; but that if he sold drugs to persons which injured them, then he could be made amenable to the law. On this footing—not very satisfactory to the inhabitants of the district—the matter now remains. No decisive step can be taken until somebody has been supplied with arsenic in mistake for Epsom salts."

LETTS'S MEDICAL DIARY FOR 1873.

THE great convenience of this Diary is now too well known to the profession to require us to explain it in detail. The Diary can be had of various sizes according to the need of the practitioner, and in various binding according to his taste up to a beautiful looking book with gilt edges, which constitutes an ornament to the study-table or the carriage. The table of contents includes information on a great variety of ethical and scientific matters of much use to the practitioner, and which can be put into no place more convenient than his visiting-book. There is also a monthly diary, providing an entire page for each day's engagements. Further, a visiting list paper, arranged for working with Letts's Medical Ledger and Medical Diary.

BARGEE LEECHDOMS.

To the Editor of THE LANCET.

SIR,—The herb known as the "thousand-leaved grass," so much valued by the bargemen of the Thames, is the well-known *Achillea millefolium*, common yarrow or milfoil. The practice of gathering herbs both for sale and use is equally common with the bargemen of this country everywhere; nor is it confined to them, as all know who have resided for any length of time in the manufacturing districts. It was highly valued by the ancients as a styptic vulnerary and astringent. They ascribed its discovery to Achilles, who, it is said, by its application healed the wounds of his companions in arms. John Gerard, known as "Old Gerarde," in his "Herball" of 1597, says: "The leaves of yarrow doth close up wounds, and keepeth them from inflammation or fiery swelling; it stancheth bloud in any part of the body, and it is likewise put into bathes for women to sit in; it stoppeth the laske, and being drunke it helpeth the bloudy flixe." In later times its great reputation has revived. "Stahl, Hoffmann, Buchwald, and Chomel recommend it in hæmorrhages from the stomach, lungs, and uterus, also in dysentery. Hoffmann states that a calculous affection was completely relieved by it; and, according to Gilimer, it is much relied upon in Norway for the cure of rheumatism." (See Burton and Castle's "Flora.") The bargemen and common people throughout England, Scotland, and Wales generally use it in infusion or decoction for the cure of colds, piles, bloody urine, rheumatic pains, and inflammation. It is, in fact, one of their favourite remedies, and is applied by them universally, externally as well as internally, for almost every ailment to which they are liable. Yours, &c.,

Plymouth, Jan. 13th, 1873. A. Z.

To the Editor of THE LANCET.

SIR,—Referring to your annotation last week, under the head of "Bargee Leechdoms," it is probable that yarrow (*Achillea millefolium*) is the plant, and not the tansy, as suggested. Like the agrimony, the English millefoil or yarrow is a favourite herb among the country people.—Yours truly,

January 13th, 1873. F. L.

M.D. Edin.—Paraguay is not a very promising field for the medical emigrant. The climate is delightful; the air being pure and invigorating, and so mild that even in mid-winter the people wear without inconvenience the thinnest clothing. Such illnesses as occur are cured by the natives themselves, who have a great belief in the efficacy of certain indigenous herbs, in the preparation of which they are skilled. Intermittent fever sometimes prevails; but is not, as in other subtropical latitudes, endemic.

A Sufferer.—By obtaining a letter from a governor or annual subscriber. Urgent cases, of course, always receive attention irrespective of any letter.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Knowing the kind interest you take in the welfare of the Army Medical Department, I venture to write to ask if you or any of your correspondents can set at rest a much-vexed question of vital importance to assistant-surgeons. In the Warrant, on the strength of which we entered the service, it is stated that "a surgeon after twenty years' full-pay service *in any rank* becomes a surgeon-major." Now, Sir, does the word "surgeon" mean one who has been already promoted to that rank in the army, or does it merely signify a medical officer? If the former is the case, it will be a mere waste of time to remain in the service, as by careful calculation of the average annual number of promotions I cannot hope to be promoted in less than twenty-six years' service! and in stating this I am careful not to exaggerate the evils of the case. Most assistant-surgeons take the hopeful view of the case, the wish being father to the thought; but the wording of the sentence is very ambiguous, and, for the sake of those so vitally concerned, ought to be made thoroughly understood.

Your obedient servant,

January 9th, 1873. A SENIOR ASSISTANT-SURGEON.

Enquirer.—Meadows' Midwifery; Thomas on Diseases of Women; West and Eustace Smith on Diseases of Children; Nicholson's Zoology; Lyell's or Jukes's Geology and Physics.

DISEASES OF THE EAR.

To the Editor of THE LANCET.

SIR,—Your correspondent, Mr. W. J. Barkas, will pardon my drawing his attention to the fact that he has reasoned from a particular to a universal. His experience only weakens Mr. Dalby's proposition; it does not affect my thesis. Mr. Dalby, doubtless, did not hypothetically assert that deaf persons hear better under collateral excitement; and in corroboration I may state that three deaf pupils, now learning singing from me, state that they can *always* hear "more distinctly" when travelling than when stationary. Being so, I endeavoured to account for the phenomenon. Paralysis of the auditory nerves would cause hearing not to be so influenced, and deafness would be permanent and unchanging. The majority of deaf cases, however, do not appear to arise from this cause, so probably statistics would show Mr. Dalby's proposition to be in the main true.

I am, Sir, truly yours,

Edgbaston, Jan. 11th, 1873. CHARLES LUNN.

L.F.P.S. (Glasgow) is entitled to one guinea in the case of a pauper; to two, we believe, in the case of a non-pauper. But let him consult Browne and Sabben's Manual of the Law of Lunacy.

Mr. Morton should place himself in the hands of a medical practitioner in whom he has confidence.

RETIRING ALLOWANCES.

To the Editor of THE LANCET.

SIR,—When first I entertained the idea of retiring from the appointment I lately held as surgeon of the West Sussex County Prison, I made many efforts to discover precedents (under the Act of 1865) for the award of a retiring allowance, but without success. I beg to state, for the information of any of my brethren who may hold similar appointments, that on the 2nd of January of this year, at the Petworth Quarter Sessions, I was granted the full amount of superannuation allowance permitted by the Act—viz., £83 6s. 8d., being two-thirds of the salary I enjoyed at the time of my retirement. My age and service were 68 and 33 years respectively, and I believe that I am the first recipient under the regulations mentioned above.

I am, Sir, your obedient servant,

ROGER TURNER, M.D.

Spencer Lodge, Wandsworth Common, Jan. 13th, 1873.

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